SPECIAL REPORT NO. CAR/KAZ-5

South Kazakstan Oblast Health Demand Survey Results

January 1996

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Submitted by the Zdrav*Reform* Program to:
AID/ENI/HR/HP
AID Contract Number: CCN-0004-C-00-4023-00

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INTRODUCTION

1.1 Introduction to the Zdrav*Reform* Program

The Zdrav*Reform* Program (ZRP), funded by the United States Agency for International Development (USAID) and implemented by Abt Associates Inc., is a multiyear program that provides collaborative support and innovative approaches to health care financing and health care organization and management reform in the New Independent States (NIS) of the former Soviet Union. The program assists governments and private sector institutions to implement and test new organizational, management, and financing systems for health care services delivery as the NIS move to market-oriented economies. These reforms are intended to identify long-term solutions to problems inherent in the health care systems as they were organized and financed during the Soviet era, such as problems of reliability and sufficiency of financing, inefficiency of resource use, and inadequate quality of care, while preserving relative equity of access.

Zdrav*Reform's* headquarters in Bethesda, Maryland, supports three regional offices: one each in Moscow, Russia; Kiev, Ukraine; and Almaty, Kazakhstan. The regional office in Almaty supports Zdrav*Reform* activities in Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, and Turkmenistan.

The Zdrav*Reform* Program, in collaboration with national- and oblast-level ministries of health and other government agencies, has designated portions of South Kazakhstan Oblast as an intensive demonstration site (IDS) and has established a site office in Shymkent to support and coordinate health care reform activities. The regional office in Almaty provides technical and managerial support and coordination to these IDS activities.

1.2 Country and IDS Strategy

Kazakhstan is experiencing a transition from a command to a market economy. The goal of the Zdrav*Reform* Program is to strengthen the capacity to manage the human dimension of the transition to democracy and a market economy by improving the efficiency, quality, and sustainability of health care services.

In the South Kazakhstan Oblast/Intensive Demonstration Site (IDS), the program will focus on achieving the following goals with the anticipated impact of improving efficiency, quality, and access to health care services:

- Establish and have functioning a basic health insurance program and cost recovery system.

  Kazakhstan is currently experiencing a crisis in funding its health care sector. Even before the breakup of the Soviet Union, the percentage of gross national product (GNP) devoted to health care was significantly less than that in other industrialized countries. The situation has significantly deteriorated since independence. The percentage of GNP devoted to health care,

which had been 6 percent in the 1980s, declined to approximately 3.3 percent in 1990 and 1.6 percent in 1992, although it rose to 2.8 percent by 1994.[1]

A principal concern of the health care sector is how to generate additional resources that are independent of the state budget. National authorities have chosen to accomplish this by planning several payroll-tax-based health insurance demonstration projects. Under these projects, employer premiums and national budget monies would fund a basic health insurance (BHI) fund. Design of a realistic minimum benefits package for the BHI would decrease the scope of government support and encourage the development of private insurance. User fees might also be charged for both the mandatory services and the supplemental benefits not contained in the minimum benefits package.

Health insurance legislation to mandate the development of a BHI fund in each oblast is still under consideration in the Supreme Soviet. In 1992, the Council of Ministers established three oblasts, including the program pilot area of South Kazakhstan Oblast, as health care sector demonstration areas. Results of these experiments have been mixed, due to a lack of local knowledge of and experience with health insurance systems, and conflicting or ambiguous laws and decrees that have curtailed the implementation of some activities. At the request of the Ministry of Health (MOH), the Zdrav*Reform* Program is assisting in designing and implementing a BHI fund in South Kazakhstan Oblast, and will provide the measures to monitor and evaluate the results.

- Establish new primary care practices and expand and strengthen existing primary care practices.

Another fundamental problem in the Kazakhstan health care system is the overdevelopment of the hospital sector relative to the primary care sector. Primary care is the most cost effective method of treating the majority of medical problems; however, presently, almost two-thirds of the country's health resources go to hospital care (source: Country Action Plan/Kazakhstan, 2/95). In Kazakhstan, 64.3 percent of the entire health care budget is spent on hospitals, compared with 19.1 percent in Turkey, 36.6 percent in Germany, and 46.2 percent in the United States. The Organization for Economic Cooperation and Development average is 46.1 percent.

Less than 15 percent of Kazakhstan's physicians provide primary care (compared with 70 percent in Germany, for example), and the majority of those who do are based in polyclinics where the financial and organizational structure provides little incentive to treat patients. Instead, polyclinic patients are referred to polyclinic or hospital specialists. Extremely high referral rates and overspecialization of physicians have created an inefficient service delivery system that provides poor continuity of care.

To support the development of cost-effective primary care services, the Zdrav*Reform* Program will provide short-term technical assistance, training, and grants to expand and strengthen the 30 existing primary care group practices and develop new primary care practices in the South Kazakhstan pilot area.

[1] Abt Associates Inc. Zdrav*Reform* Program Kazakstan Country Action Plan for September 1994-December 1996, Abt Associates Inc: Bethesda. Maryland, February 1995.

- Develop and implement new provider payment methods for basic health insurance fund services,

  Kazakhstan's hospitals currently have little incentive to increase their efficiency, because resources are centrally allocated based on input measures such as the number of beds rather than the quality and complexity of patient services. This creates a strong incentive to maintain excess bed capacity and keep patients longer than necessary.

  To improve this situation, Kazakhstan's provider payment system should be changed from one based on planning norms to one that rewards efficiency and improved outcomes. Efficiency can improve as hospitals respond to incentives to keep patients for less time and shift nonacute patients into primary care and subacute facilities.

  The polyclinic system also needs to be restructured, to allow greater financial and managerial autonomy for primary care practices. The introduction of new payment systems would create incentives for primary care physicians to increase their patient load and reduce referrals to specialists. It would also spur the creation of new primary care practices and increase the number and quality of primary care physicians.

  One positive step in the development of Kazakhstan's primary care sector so far would be to establish a mechanism to allow patients (or families) their choice of physicians.

CHAPTER 2

SURVEY METHODOLOGY

2.1 Objectives

The Ministry of Health (MOH) of the South Kazakhstan Oblast, with technical and organizational assistance from the Zdrav*Reform* Program, conducted this household survey from September 4-October 27, 1994 to collect baseline data on the current levels of the demand for and utilization of health care services among the population in the oblast's intensive demonstration site (IDS). These data will be used to plan and evaluate many of the program's pilot demonstration activities.

The survey collected information on the following:

- socioeconomic/demographic characteristics, including estimates of household monthly income and monthly expenditures,
- measures of current health status,
- utilization of any health care services in the past month,
- utilization of inpatient hospital services in the past year, and
- knowledge and attitudes toward health insurance, past use of voluntary insurance plans, and willingness to pay for additional, supplemental health insurance.

2.2 Questionnaire Design

The survey questionnaire consisted of a household schedule and a series of five modules as follows:

Household Schedule: For this schedule, the head of household was asked to list the following for each individual in the household: relationship to family, marital status, sex, age, and level of education. The head of household was also asked to estimate the monthly total household income and expenditures, describe the housing situation, and list the household's utilities and durable goods.

Module A/Health Status: Each member of the household was asked the following information status of current health (consisting of a self-evaluation from good to bad), medications taken in the past seven days, medical operations undergone during his or her lifetime, and whether he or she had ever been diagnosed as having a chronic health condition such as diabetes, heart disease, and so on.

Module B/Illness/Injury in the Past Month: All household members who reported that they had been ill, injured, or had received medical treatment at home or at a health facility in the past month were asked where they were treated, the types of treatment they received, the payments they made for this treatment, and their satisfaction with the services they received.

Module C/Preventive Checkup in the Past Month: All household members who reported that they had received a preventive checkup in the past month were asked where they were treated, the types of treatment they received, the payments they made for this treatment, and their satisfaction with the services they received.

Module D/Hospitalization in Past Year: All household members who reported that they had been hospitalized in the past year were asked where they were treated, the types of treatment they received, the payments they made for this treatment, and their satisfaction with the services they received.

Module E/Employment Status; Knowledge and Past Utilization of and Willingness to Pay for Voluntary Health Insurance: All household members 18 years and older were asked their employment status, their knowledge of the concept of voluntary health insurance, their past use of and satisfaction with available voluntary health insurance plans, and their willingness to pay for supplementary health insurance.

2.3 Sample Design

The survey covered the four rayons included in the IDS insurance demonstration and four contiguous rayons that will serve as "controls" in the postprogram evaluation (see Table 2.1). The size of the sample was estimated to be 1,500 households. However, to facilitate the selection of the sample households and to adjust for absent households, 1,600 households were selected for interview. In addition, at the request of the MOH, 300 households from the catchment areas of the newly established family practice clinics were added, for a total of 1,900 households interviewed.

Table 2.1 Urban/Rural Population by Rayon

	Urban	Rural
IDS Rayons		
Shymkent	397,997	30,133
Dzetysaiskii	27,807	48,740
Pahtauralskii	25,612	46,502
Tyulkubasskii	15,295	70,487
Control Rayons		
Algabaskii	---	50,219
Kirovskii	9,420	51,813
Arysskii	33,523	22,017
Syramskii	---	177,738
Total	509,654	497,649

The population in the eight rayons included in the sample design is 1,007,303, which represents more than 50 percent of the oblast's total population of approximately 2 million.

The Urban Sample

For this survey, the urban sample frame was defined as the city of Shymkent. The MOH selected four of the 10 polyclinic catchment areas as representative of this urban population. The survey team then selected households for interview from the catchment areas according to a three-stage sampling design. At the first stage, the team selected the number of households it would interview from each individual area based upon that area's percentage of the total population of the four catchment areas.

Each polyclinic catchment area is already subdivided into a number of existing geographic units, each containing between 2,000 and 2,500 persons. The population of each unit is assigned to a specific group of polyclinic doctors. At the second sampling stage, the survey team randomly selected a sample of these units from each catchment area.

Finally, the team chose a stratified, random sample of households from the listing of all the households residing in each selected unit. (This household listing is maintained by the nurse responsible for administering the unit and is updated annually.) The team selected a first household in each unit using a random number, and then selected each third subsequent household until 30 households had been chosen for interview.

The Rural Sample

For this survey, the population living outside of Shymkent City was defined as rural. The survey team selected rural households for interview using the same three-stage sampling design it used to select the urban sample. First, the team chose the number of households per rayon based on that rayon's percentage of the total population of the seven rayons in South Kazakhstan.

Second, within each rayon, the team proportionally divided the sample according to the percentage of the population that lived in the "rayon center" (the administrative center) and the percentage that resided in two rural areas within 30 kilometers of the rayon center (to be easily accessible by vehicle).

Third, as with the urban sample, the team randomly selected geographic units within each catchment area. The team chose a stratified, random sample of households from the listing of all households residing in each geographic unit using the same methodology as was applied to the selection of the urban sample.

2.4 Survey Organization

Senior officials of the oblast's Ministry of Health and its affiliated medical school (Shymkent Medical School), in collaboration with the Zdrav*Reform* technical team designed and pretested the questionnaire, selected the sample, and organized and trained the fieldwork staff. The MOH team then managed the survey fieldwork and the central office where the completed questionnaires were edited and coded. The Oblast Data Processing Center entered and cleaned up the survey data and generated the final data set.

Fieldwork Activities

Training for the fieldwork staff began on October 7, 1994. Sixty Shymkent Medical Institute students participated in five days of training in interviewing and fieldwork procedures. The students then participated in a pretest of the questionnaire. For the pretest, nurses took the students to interview two families each at locations in the four polyclinic catchment areas that were not included in the survey sample. The survey staff then reviewed the pretest results with each team of interviewers. The resulting recommendations were incorporated into the final version of the questionnaire. After two more days of training and a second pretest, the teams were ready to begin the survey.

Fieldwork in Shymkent began on October 21. The teams worked through the 3-day weekend (Monday was a holiday), since many respondents would be at home. The teams spent the next seven to 10 days in Shymkent and then traveled into the rayons to interview the rural households. Fieldwork was completed on November 26.

Data Processing

Several students from the Shymkent Medical Institute (a five-year program granting medical degrees) participated in the fieldwork training and pretest of the questionnaire. At the start of fieldwork, they received additional training to review and edit the completed questionnaires. After editing, the questionnaires were transferred to the Oblast Data Processing Center for entry and cleanup. The processing of the survey data began shortly after fieldwork and continued until December 6.

CHAPTER 3

INFORMATION ABOUT THE SAMPLE

Table 3.1 summarizes the sample sizes and interview completion rates by rayon. The survey team originally selected 2,070 households for interview (69 clusters of 30 households each). As noted in Chapter 2, an additional 10 clusters (300 households) were added to represent the family practice catchment areas in Shymkent. This increased the total households in the survey sample to 2,370.

Overall, the field teams located and interviewed 1,847 households, or 78 percent of the total sample. The completion rates were highest in Shymkent (93 percent) and Syramskii Rayons (96 percent); in the remaining rayons, the household completion rate ranged from 32 percent in Arysskii to 79 percent in Tyulkubasskii.

The survey team interviewed 6,860 household members, 48 percent of whom reside in Shymkent; 17 percent, in Syramskii; and the remaining 35 percent, throughout the other six rayons.

Table 3.1 Information on the Sample

	Rayon Shym.	Dzet.	Paht.	Tyul.	Alga.	Kir.	Ary.	Syr.	Total
No. of Clusters	35	7	5	5	4	6	6	11	79
No. of Households Targeted	1,050	210	150	150	120	180	180	300	2,340
No. of Households Interviewed	980	154	73	119	89	85	58	289	1.847
Percentage of Households Interviewed	93%	73%	49%	79%	74%	47%	32%	96%	78%
No. of Individuals Interviewed	3,290	734	279	314	472	346	255	1,170	6860

Table 3.2 presents some of the respondent characteristics by rayon. Overall, 49 percent of those interviewed are male and 51 percent female, although the percentage of male respondents varied by rayon from 47 percent in Tyulkubasskii to 53 percent in both Kirovskii and Arysskii

Fifty-four percent of the survey respondents are between 16 and 55 years of age, with 32 percent age 15 or below, and 14 percent age 56 or older.

The respondents are very well educated. Eleven percent have a university degree, and 44 percent have graduated from a technical college or an 11-year high school program. Ten percent have degrees from nine-year high school programs, and the remaining 35 percent (mostly school-aged children) are students.

The employment rate for respondents ages 18 to 55 is 60 percent. Of those employed, 88 percent work for the government, and 12 percent are employed in the private sector. The lowest rates of unemployment occur in Shymkent (37 percent), Tyulkubasskii (29 percent), and Arysskii (36 percent).

Household per capita monthly income varies widely by rayon, from highs of 682 tenge and 662 tenge in Kirovskii and Shymkent, respectively, to only 328 tenge in Algabaskii.

Table 3.2 Distribution of Survey Respondent Characteristics by Rayon

	Rayon Shym.	Dzet.	Paht.	Tyul.	Alga.	Kir.	Ary.	Syr.	Number
Gender									
Male	48%	49%	50%	47%	49%	53%	53%	52%	3,371
Female	52%	51%	50%	53%	51%	47%	47%	48%	3,489
Age									
<16	30%	42%	32%	23%	38%	36%	36%	31%	2,209
16-55	56%	50%	56%	45%	54%	54%	51%	53%	3,695
>55	14%	8%	12%	32%	8%	10%	13%	16%	956
Education									
University Grad.	13%	9%	12%	7%	10%	10%	9%	9%	769
Tech Coll/HS (11 yrs)	46%	38%	42%	44%	46%	43%	44%	44%	3,035
High School (9 yrs)	10%	6%	10%	24%	4%	8%	8%	12%	691
Student/Other	31%	47%	36%	25%	40%	39%	39%	35%	2,365
Employment (age 18-55 years)	53%	52%	50%	64%	46%	51%	59%	53%	1,799
Employed/Government									
Employed/Private	10%	4%	4%	7%	8%	4%	5%	4%	245
Unemployed	37%	44%	46%	29%	46%	45%	36%	43%	1,346
Household per Capita Monthly Income (Tenge)	662	359	375	616	328	682	351	471	1,847

CHAPTER 4

SOCIOECONOMIC/DEMOGRAPHIC CHARACTERISTICS

4.1 Characteristics of Heads of Household

The results in Table 4.1 indicate that most heads of household in the areas surveyed are men, that these men average 45 years of age, and that the average size of their household (including themselves) is 4.1 persons. Female heads of household are older, averaging 53 years of age, and, on the average, have smaller families (2.1 persons).

Table 4.1 Distribution of Heads of Household by Gender According to Mean Age, Mean Family Size, Residence, and Education

	Gender			
	Male	Female	Total/Mean	Number
Percent Distribution	72%	28%	100%	1,847
Mean Age	45	53	48	
Mean Family Size	4.1	2.9	3.8	
Residence				
Urban	70%	30%	100%	
Rural	74%	26%	100%	
Education				
University	26%	16%	23%	
Tech Coll/HS	59%	51%	57%	
HS (9 years)	14%	29%	18%	
Student/Other	1%	4 %	2 %	
Total	**100%**	**100%**	**100%**	

Fifty-three percent of the heads of household live in urban areas; 47 percent, in rural areas

Heads of household are well educated. Almost one-quarter (23 percent) hold university degrees, and an additional 57 percent have graduated from either a technical college or a technical high school (an 11-year program of study). Eighteen percent have received a high school degree (a 9-year program of study), and the remaining 2 percent are currently students or have never graduated. Overall, male heads of household are better educated than their female counterparts; 85 percent of the men possess either a university or technical college/technical high school degree, compared with only 67 percent of the women.

4.2 Monthly and Per Capita Household Income

Figure 4.1 indicates that almost two-thirds (64 percent) of all households in the survey have monthly incomes up to 2,000 tenge (2,000 T = US$38.46). An additional 18 percent report monthly incomes between 2,001 and 3,000 tenge, 10 percent report monthly incomes between 3,001 and 4,000 tenge, and the remaining 8 percent show monthly incomes of more than 4,000 tenge.

Figure 4.1: Monthly Household Income
(US$1=52 Tenge)

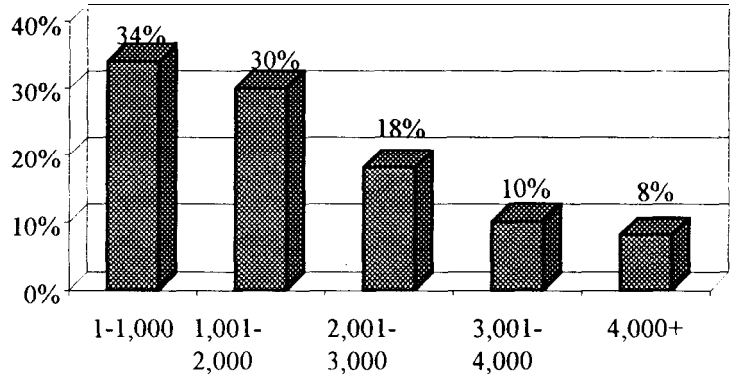
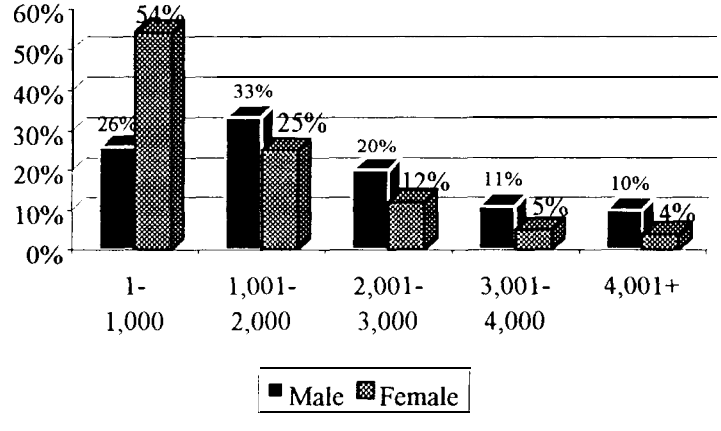
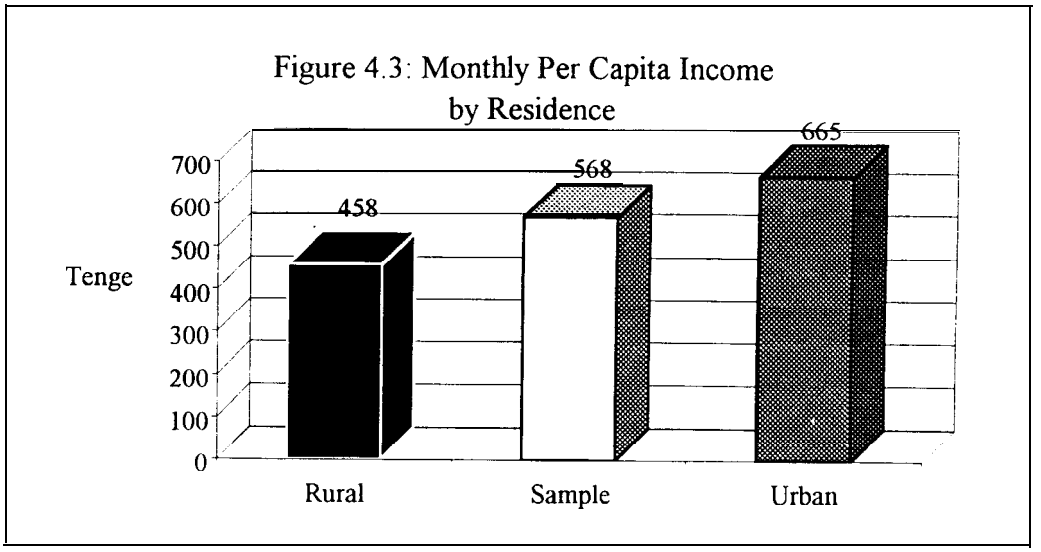


Figure 4.2 illustrates the differences in monthly household income by gender. More than half (54 percent) of the households headed by women report monthly incomes of 1,000 tenge or less, compared with only 26 percent of households headed by men. More male- than female-headed households are represented in each of the higher income categories.

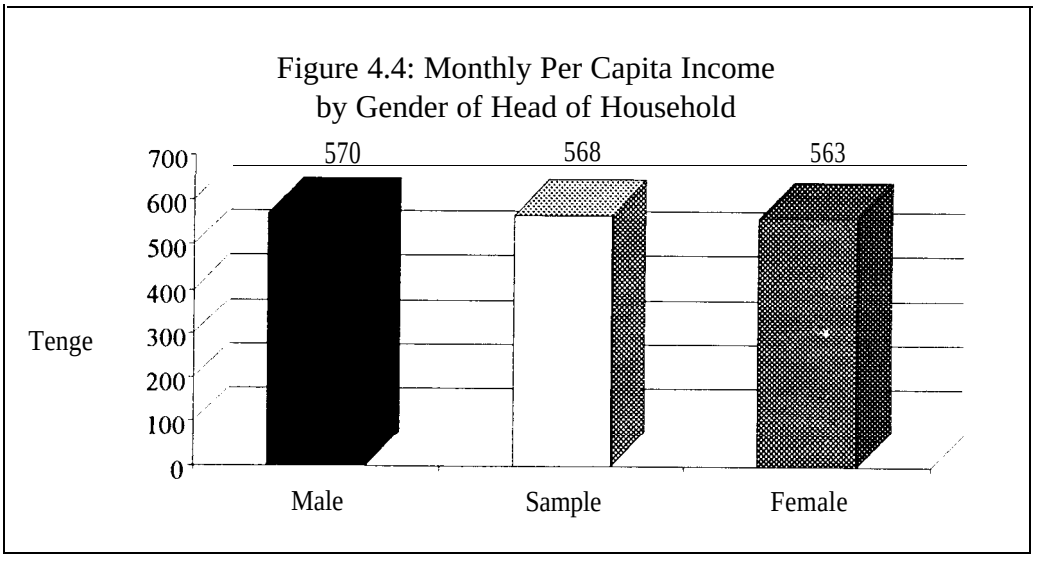
Figure 4.2: Monthly Income
by Gender of Head of Household



In Figure 4.3, the surveyed households report a monthly per capita income of 568 tenge (US$10.92). Monthly per capita income is higher in urban areas (665 tenge or US$12.79) than in rural areas (458 tenge or US$8.81).

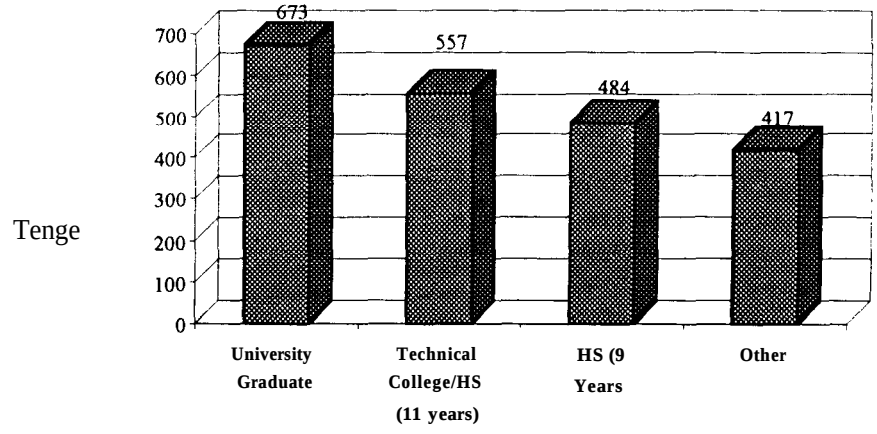


The monthly per capita incomes for surveyed households headed by both men and women are almost identical—570 tenge (US$10.96) and 563 tenge (US$10.83), respectively (see Figure 4.4). This is so because although households with male heads have higher monthly incomes, they also, on average, contain more people.



The survey shows that the more education the head of household has, the greater the household's monthly per capita income. In households where the head holds a university degree, per capita incomes average 673 tenge (US$12.94), compared with 417 tenge (US$8.02) for those households whose heads either are students or have not graduated.

Figure 4.5: Monthly per Capita Income
by Education of Head of Household



4.3 Education

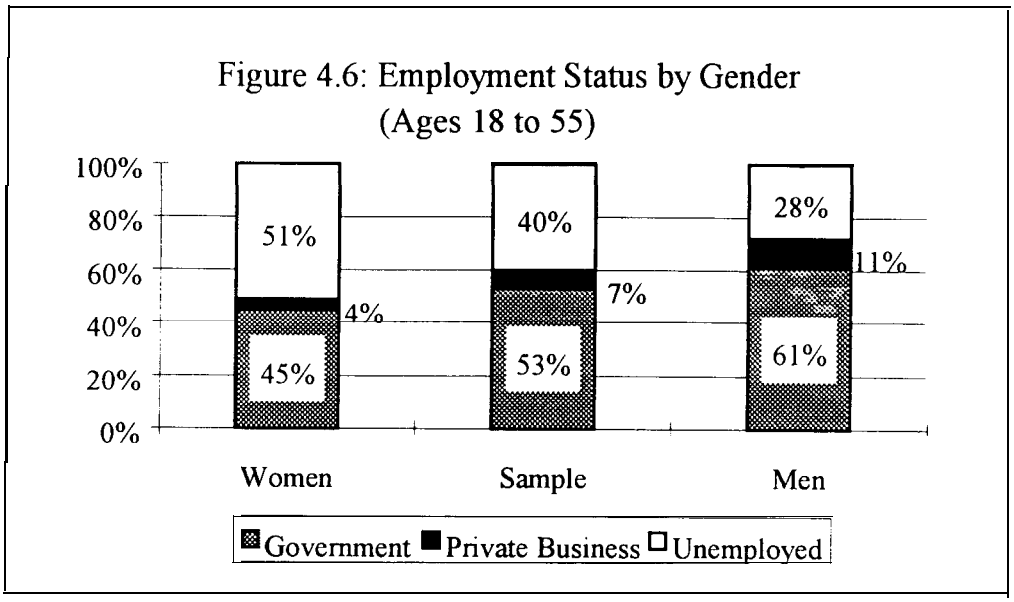
There is almost no difference in the education levels of all survey respondents ages 18 or older according to place of residence. A slightly higher percentage of urban residents hold university degrees (20 percent) compared with rural residents (15 percent).

Table 4.2 Education Level by Residence (Respondents 18 Years or Older)

	Urban	Rural	Total	Number
University	20%	15%	18%	768
Tech Coll/HS (11 yrs)	66%	67%	66%	2,906
High School (9 years)	13%	15%	14%	617
Student/Other	1%	3%	2%	91
Total	100%	100%	100%	4,382

4.4 Employment Status

As noted in Chapter 3, 60 percent of all survey respondents between 18 and 55 years of age are employed, 53 percent by government and the other 7 percent by private businesses. The employment rate is higher for men (72 percent) than for women (49 percent). (See Figure 4.6.) Men (11 percent) are more likely to be employed by private business than are women (4 percent).



Sixty-three percent of all survey respondents between 18 and 55 years of age who live in urban areas are employed, compared with only 57 percent of rural-area respondents (see Figure 4.7). Twice as many urban (10 percent) as rural respondents are employed by private business.

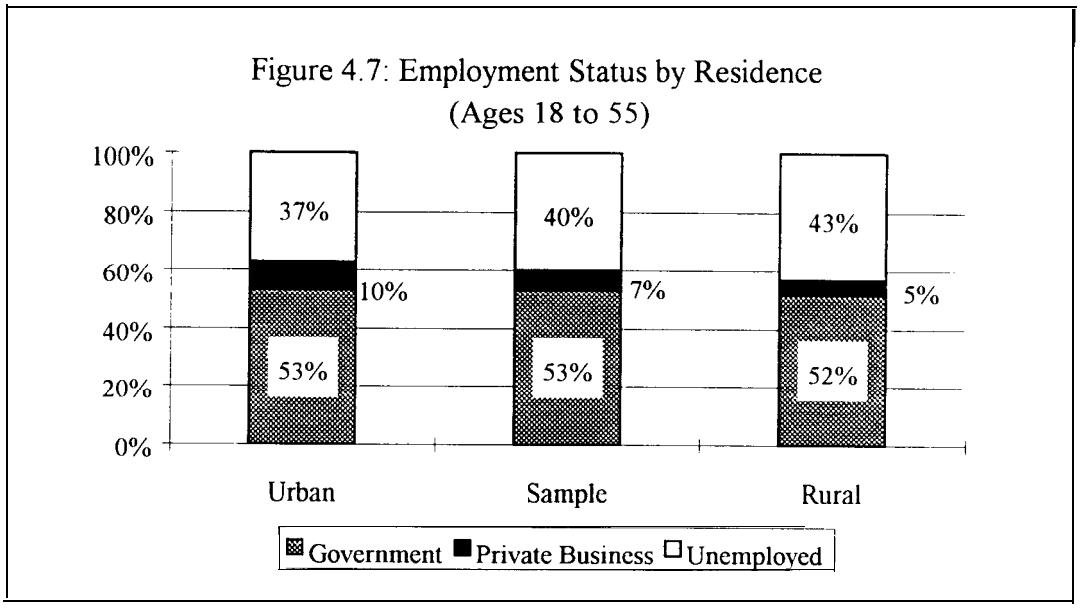
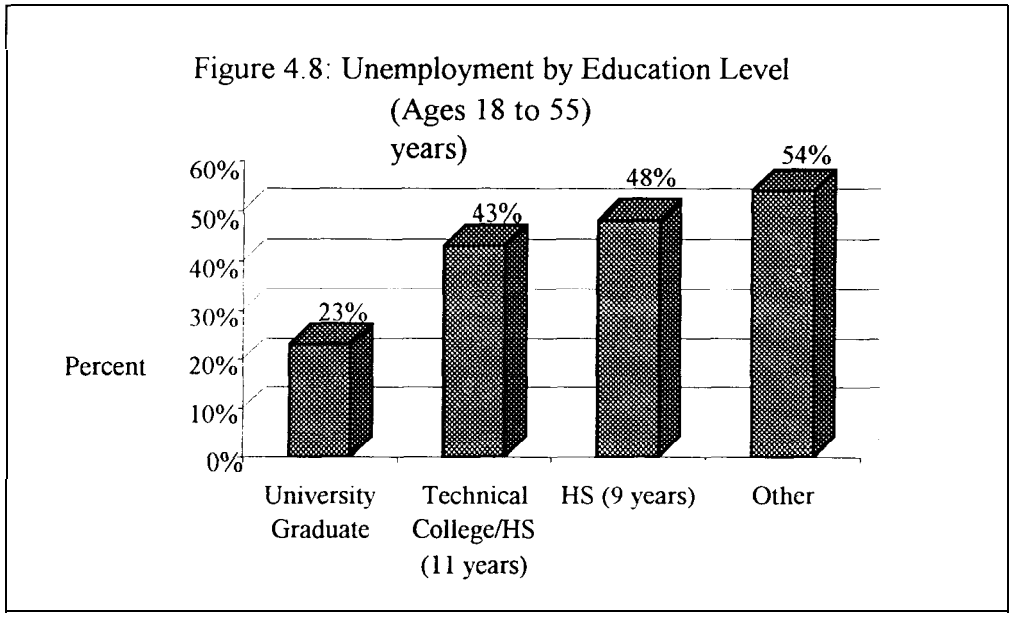


Table 4.3 shows that 66 percent of employed adults work as office workers or in the industrial or farming sectors. A greater percentage of rural (72 percent) than urban adults (61 percent) are employed in these sectors, while more than twice as many urban adults (14 percent) as rural adults (6 percent) work in the research/science sector. Similar percentages of urban and rural adults work at the administrative/managerial level and in the trade/services/transportation sector.

Table 4.3 Type of Employment by Residence (Respondents 18 to 55 Years of Age)				
	Urban	Rural	Total	Number
Admin/Mgmt	7%	8%	8%	150
Research/Science	14%	6%	10%	210
Office Workers	40%	47%	43%	875
Industry/Farming	2 1%	25%	23%	472
Trade/Ser/Trans	18%	14%	16%	331
Total	100%	100%	100%	2,038

Survey respondents with more education have lower rates of unemployment. The unemployment rate for university graduates is only 23 percent, compared with an unemployment rate of 54 percent among those who have never graduated or are still students (see Figure 4.8).



4.5 Household Characteristics

In urban areas, most households live in apartments (69 percent), with detached houses being the second most popular type of dwelling unit (24 percent). In rural areas, this pattern is reversed: 60 percent of households live in detached houses and 27 percent in apartments (see Table 4.4).

Table 4.4 Housing Type by Residence

	Urban	Rural	Total	Number
Apartment	69%	27%	49%	911
Attached House	7%	13%	10%	180
Detached House	24%	60%	41%	756
Total	100%	100%	100%	1,847
Mean Number of Rooms (Excluding Bath/ Kitchen)	2.9	4.0	3.4	

Almost all households (94 percent) own their house or apartment. This high level of ownership is the same in both urban and rural areas (see Table 4.5)

Table 4.5 Housing Ownership by Residence

	Urban	Rural	Total	Number
Family	94%	95%	94%	1,742
State	4%	3%	4%	66
Enterprise	1%	1%	1%	12
Cooperative	1%		1%	12
Other		1%		2
Total	100%	100%	100%	1,834

In urban areas, 87 percent of households have their drinking water piped into their residence; another 11 percent use water from a public tap (see Table 4.6). In rural areas, only 60 percent use water that is piped into the dwelling; 32 percent use water from public taps and 7 percent use private wells.

Table 4.6 Source of Drinking Water by Residence

	Urban	Rural	Total	Number
Piped	87%	60%	74%	1,362
Public Tap	11%	32%	21%	391
Well (Private)	2%	7%	4%	79
Well (Public)	-	1%	1%	11
Total	100%	100%	100%	1,843

In urban areas, 67 percent of households have private flush toilets, while most of the remaining households use latrines (30 percent). Conversely, in rural areas, 85 percent of households use latrines, and another 12 percent have either inside or outside private flush toilets (see Table 4.7).

Table 4.7 Type of Toilet by Residence

	Urban	Rural	Total	Number
Flush (Private)	67%	6%	38%	709
Flush (Public)	-	1%	1%	12
Outside Flush (Private)	2%	6%	4%	72
Outside Flush (Public)	1%	1%	1%	26
Pit/Latrine	30%	85%	56%	1,025
Total	100%	100%	100%	1.843

Almost all households surveyed have electricity (99 percent), and the majority have stoves, refrigerators, and washing machines -- with more urban households possessing these durable goods than rural households (see Table 4.8). Almost every household owns a television, with more black-and-white sets (59 percent) found in the rural areas, and more color sets in the urban areas (66 percent). Fewer households have radios than have televisions. Forty-four percent of households have telephones (46 percent of urban households and 43 percent of rural households), and 20 percent report owning a car or truck, with slightly more rural (23 percent) than urban households (18 percent) owning one or the other.

Table 4.8 Percent of Households Owning Specific Durable Goods

	Urban	Rural	Total
Radio	52%	42%	47%
Electricity	99%	99%	99%
B/W TV	40%	59%	49%
Color TV	66%	45%	56%
Refrigerator	92%	81%	87%
Telephone	46%	43%	44%
Wash Machine	79%	67%	73%
Stove	97%	91%	94%
Bicycle	9%	11%	10%
Motorcycle	3%	8%	5%
Car/Truck	18%	23%	20%

CHAPTER 5

HEALTH STATUS

5.1 Subjective Measures of Health

Respondents were asked to rate their health using a five-point scale ranging from very good to very bad. The results in Table 5.1 indicate that most of the population consider themselves to be in good or very good health. As expected, people younger than 16 consider themselves to be in better health than people 16 or older consider themselves to be. Eighty-four percent of people younger than 16 consider themselves to be in very good or good health, while only 60 percent of those between the ages of 16 and 55 consider themselves to be such. Eighteen percent of people older than 55 say they are in good or very good health.

Table 5.1 How the Population Evaluates Its Own Health

	Very Good	Good	Average	Bad	Very Bad	Don't Know	Number
Sample	11.5%	48.5%	31.3%	7.7%	1.0%	0%	6,860
Rural	12.4%	54.5%	26.1%	6.1%	0.8%	0%	3,570
Urban	10.4%	42.0%	36.9%	9.5%	1.2%	0.1%	3,290
Gender							
Men	13.4%	51.5%	28.0%	6.3%	0.7%	0.1%	3,371
Women	9.6%	46.7%	34.4%	9.1%	1.2%	0%	3,489
Age							
<6	20.1%	67.1%	11.4%	0.9%	0.5%	0%	765
<16	18.2%	65.4%	14.1%	1.6%	0.6%	0%	2,209
16-55	11.5%	48.5%	31.3%	7.7%	1.0%	0%	3,695
>55	2.7%	15.4%	51.1%	27.7%	3.0%	0.1%	956
Income Group							
Poorest 25%	14.2%	50.2%	27.2%	7.4%	1.0%	0%	2,269
Richest 25%	11.4%	42.9%	37.6%	7.4%	0.4%	0.2%	1.145

Figure 5.1 indicates that people living in rural areas generally consider themselves to be in better health than those living in urban areas. A greater percentage of people living in urban areas (37 percent) rather than rural areas (26 percent) consider themselves to be in average health. A slightly greater percentage of people living in urban areas (11 percent) consider themselves to be in bad or very bad health compared with those from rural areas (7 percent).

Figure 5.1: Health Status Comparisons by Residence

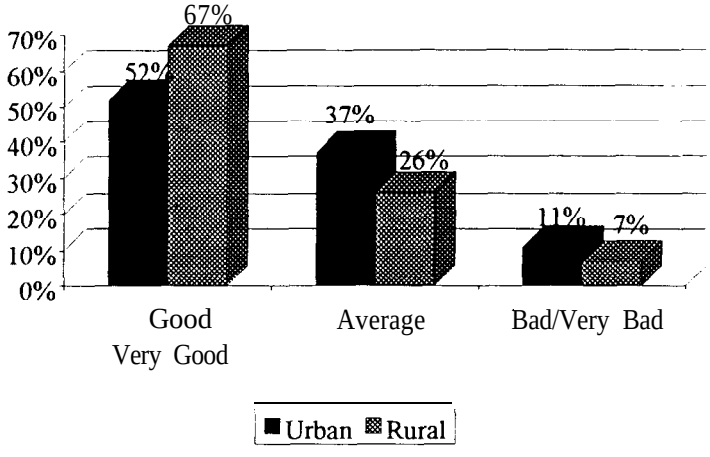


Figure 5.2 indicates that more men consider themselves to be in good or very good health than women (65 percent versus 56 percent). More women than men consider themselves to be in average health (34 percent versus 27 percent) or in bad or very bad health (10 percent versus 7 percent).

Figure 5.2: Health Status Comparisons by Gender

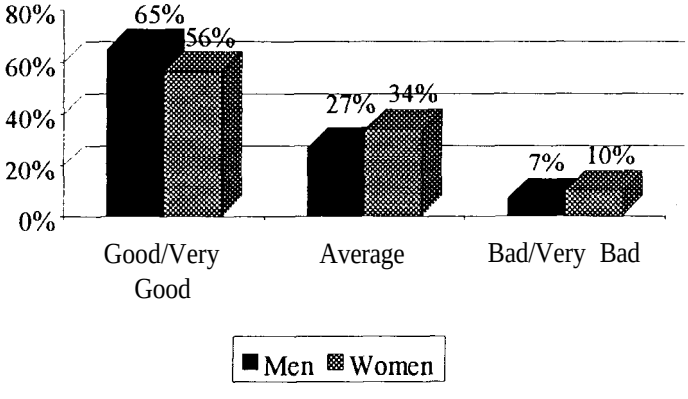
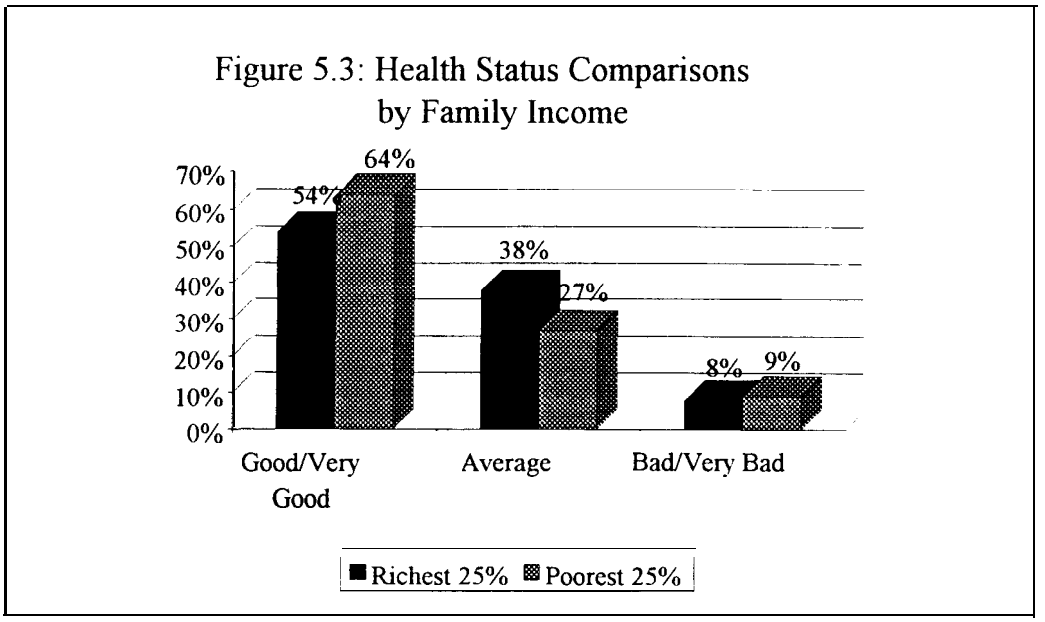


Figure 5.3 indicates that 64 percent of the population's poorest people (lowest quartile of household incomes) consider themselves to be in good or very good health, while only 54 percent of the population's richest people (highest quartile of household incomes) rank themselves in that category. More of the richest 25 percent consider themselves to be in average health (38 percent versus 27 percent), and a slightly larger percentage of the poorest 25 percent consider themselves to be in bad or very bad health (8.4 percent versus 7.8 percent).



5.2 Use of Pharmaceuticals

Respondents were asked about their use of medicines in the seven days prior to being interviewed. Table 5.2 indicates that more than half the population had not used medicine in the past seven days. Almost half of those older than 55 (42.5 percent), however, had taken medicine in the past seven days, while only 7.6 percent of people younger than 16 and 18.3 percent between the ages of 16 and 55 reported taking medicine in the previous seven days

Table 5.2 Distribution of People Using Pharmaceuticals

	Used Medicine in the Past 7 Days	Did Not Use Medicine in the Past 7 Days	Number
Sample	18.3%	81.7%	6,860
Rural	14.0%	86.0%	3,570
Urban	22.5%	77.5%	3,290
Gender			
Men	13.6%	86.4%	3,371
Women	22.8%	77.2%	3,489
Age			
<6	8.9%	91.1%	765
<16	7.6%	92.4%	2,209
16-55	18.3%	81.7%	3,695
>55	42.5%	57.5%	956
Income Group			
Poorest 25%	13.9%	86.1%	2,269
Richest 25%	22.9%	77.1%	1,145

Figure 5.4 shows that people living in urban areas had taken more medicine in the past seven days than people living in rural areas (23 percent versus 14 percent).

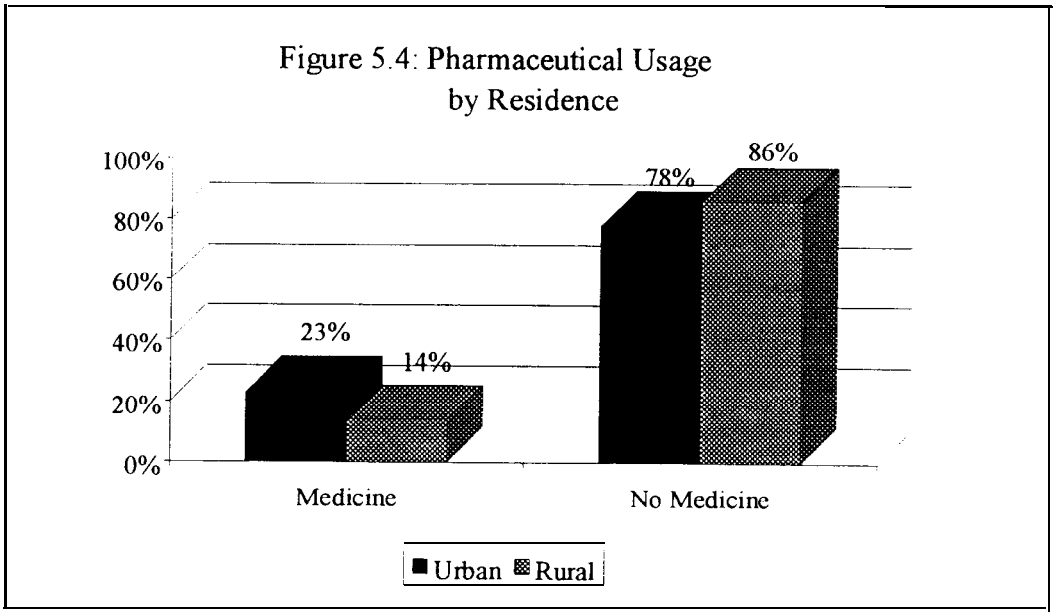


Figure 5.5 indicates that a larger percentage of women (23 percent) than men (14 percent) had taken medicine in the past seven days.

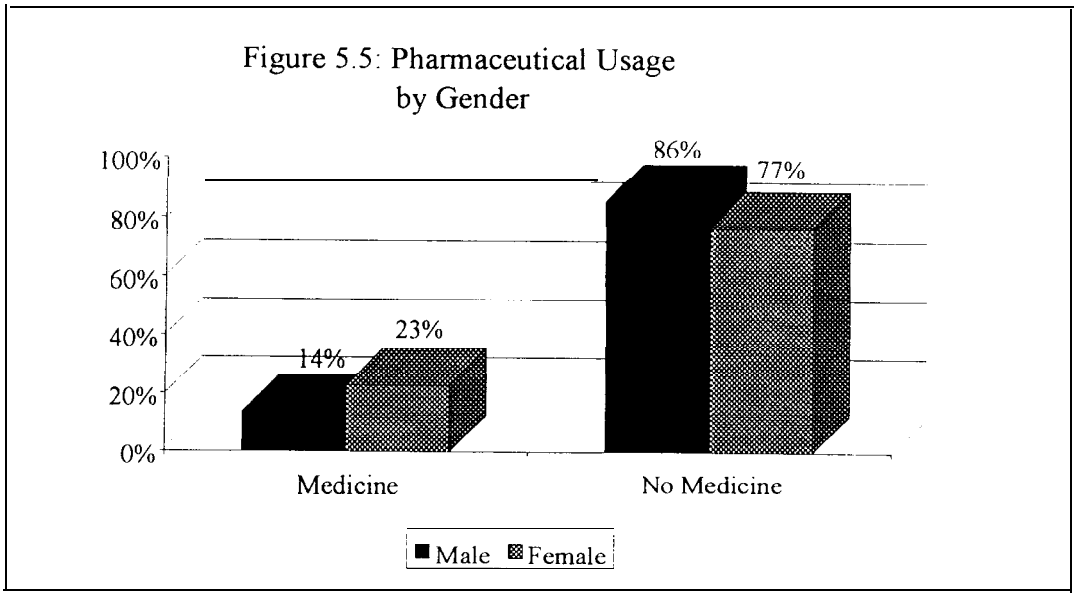
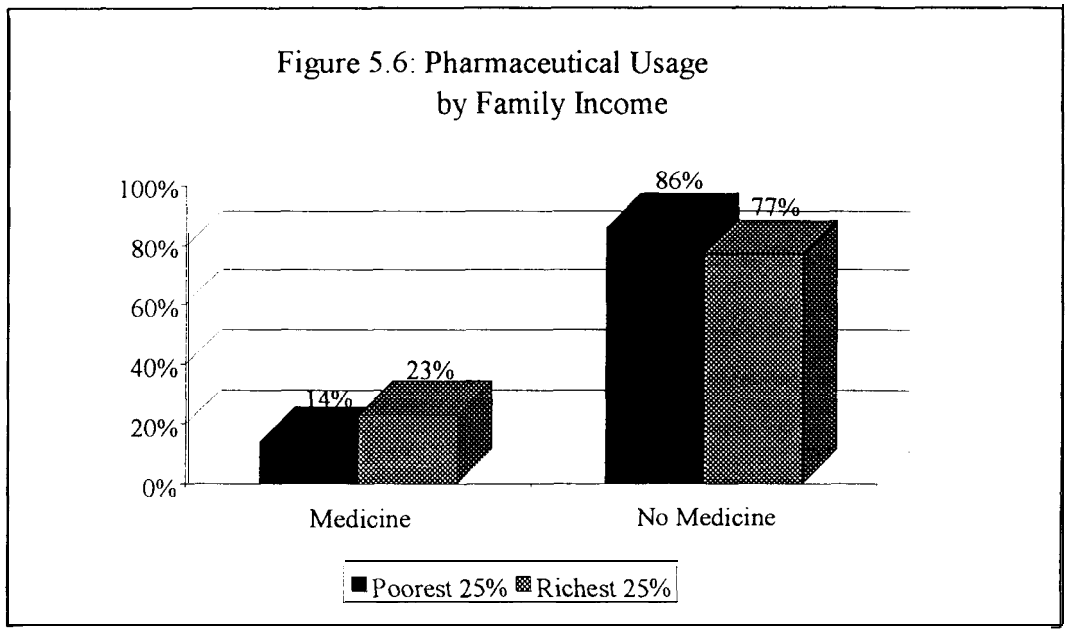


Figure 5.6 reveals that a higher percentage of the population's richest 25 percent had taken medicine in the past seven days than had the poorest 25 percent (23 percent versus 14 percent).



5.3 Number of Operations

As Figure 5.7 shows, only 20 percent of the surveyed population have ever had an operation

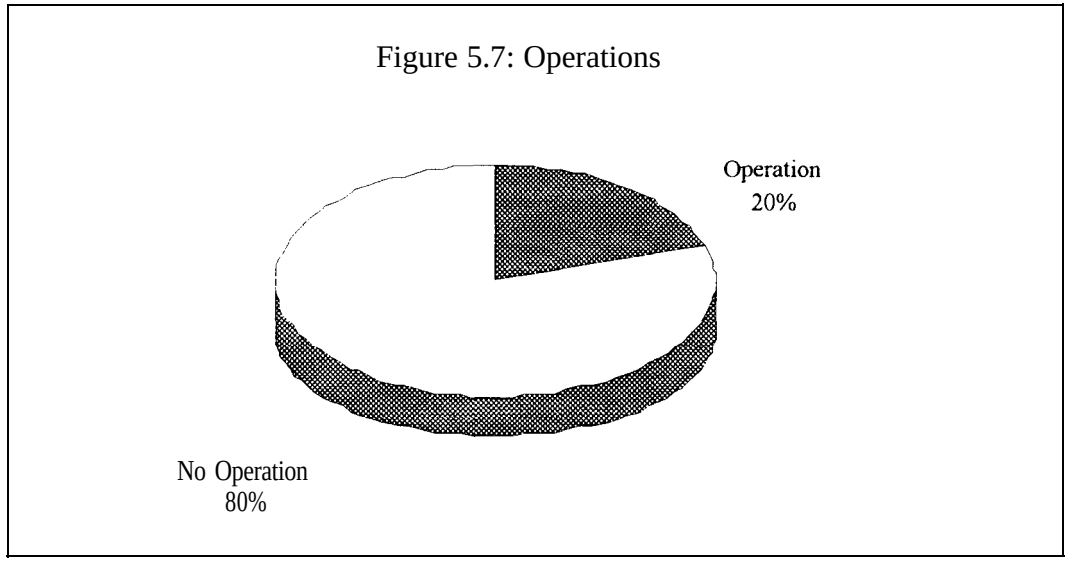


Table 5.3 illustrates that among those surveyed, the older the group the greater its number of operations. As expected, a much larger percentage of people older than 55 (42.3 percent) have had operations than have people between 16 and 55 (20.4 percent) or younger than 16 (3.9 percent).

Table 5.3 Distribution of Operations

	Have Had an Operation	Have Never Had an Operation	Number
Sample	20.4%	79.6%	6,860
Rural	18.2%	81.8%	3,570
Urban	22.7%	77.3%	3,290
Gender			
Men	19.4%	80.6%	3,371
Women	21.3%	78.7%	3,489
Age			
<6	1.3%	98.7%	765
<16	3.9%	96.1%	2,209
16-55	20.4%	79.6%	3,695
> 5	42.3%	57.7%	956
Income Group			
Poorest 25%	17.8%	82.2%	2,269
Richest 25%	24.6%	75.4%	1.145

Figure 5.8 indicates that respondents living in urban areas have had slightly more operations than those living in rural areas (23 percent versus 18 percent).

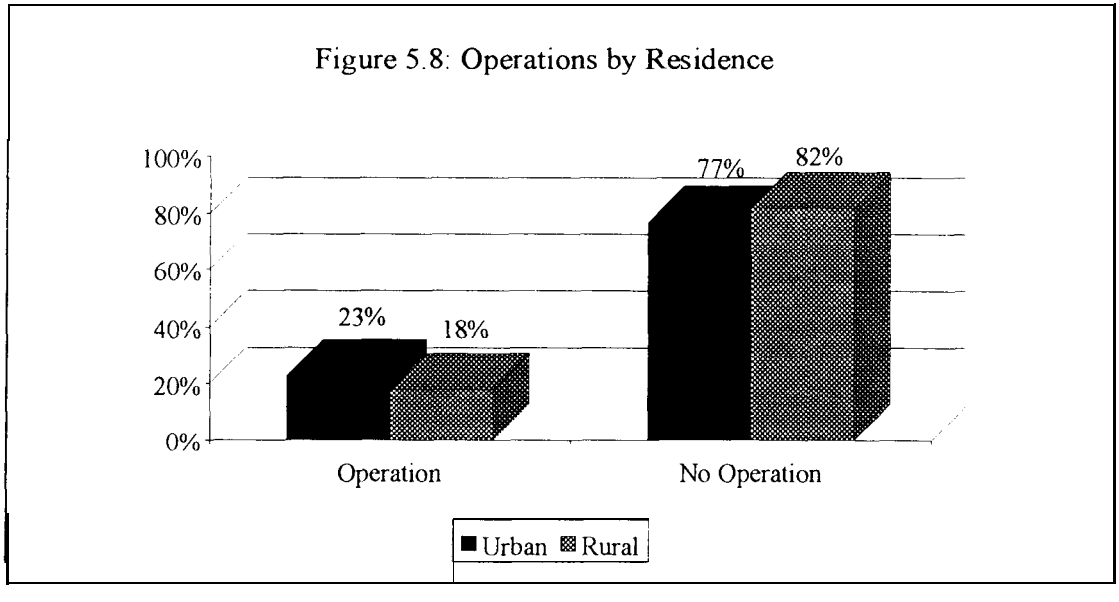
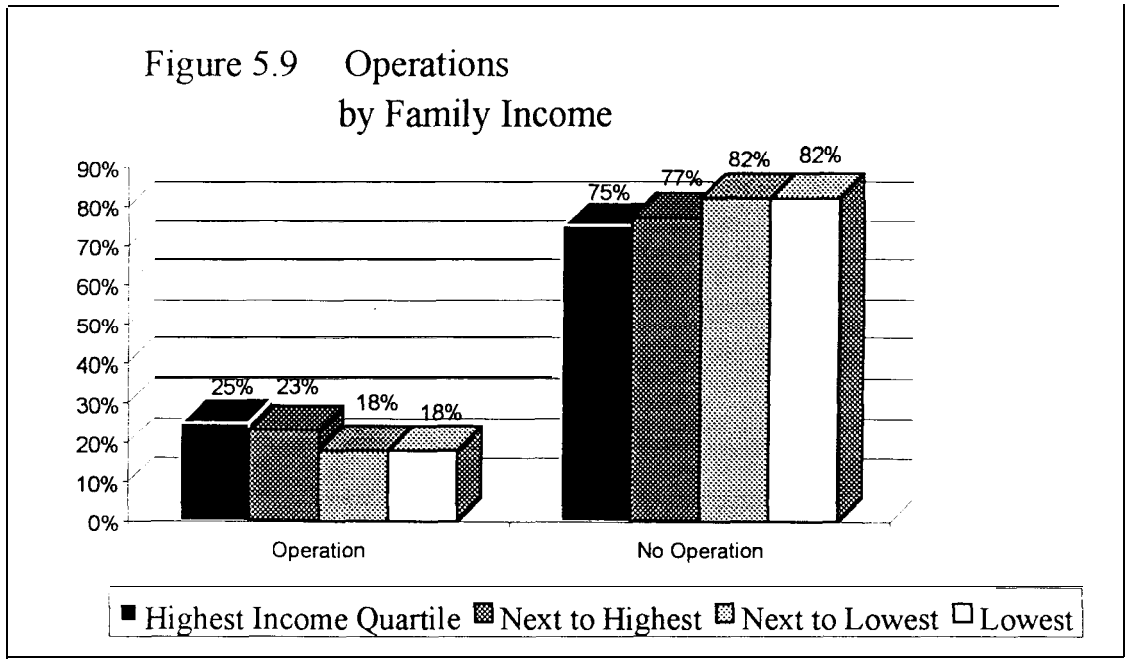


Figure 5.9 indicates that, as expected, wealthy respondents tend to have had more operations than have poorer respondents.



5.4 Disease Distribution

As shown in Table 5.4, of the total population surveyed, a little more than one-quarter reported having been diagnosed with a particular illness. Of those reporting an illness, 12.5 percent have had cardiovascular problems; 3.2 percent, gastrointestinal disorders; and 2.0 percent, pulmonary illnesses. A slightly greater percentage of people living in urban areas than in rural reported having received a particular diagnosis (31.3 percent compared with 24.0 percent).

It should also be noted that a higher percentage of the urban population than the rural population reported having received a diagnosis of cardiovascular disease (14.4 percent versus 10.7 percent).

Table 5.4 Distribution of People Reporting a Diagnosis of a Particular Illness

	Sample	Rural	Urban
Percentage Reporting Disease	27.9%	24.0%	31.3%
Cardiovascular	12.5%	10.7%	14.4%
Gastrointestinal	3.2%	3.2%	3.3%
Pulmonary	2.0%	1.9%	2.2%
Infections	1.7%	1.4%	1.9%
Neuromuscular	1.7%	1.3%	2.0%
Endocrinologic	1.6%	0.9%	2.3%
Rheumatic	0.9%	0.9%	0.9%
Kidney	0.9%	0.8%	0.9%
Ear, Nose, and Throat	0.7%	0.5%	0.9%
Hematological	0.5%	0.7%	0.2%
Oncological	0.4%	0.2%	0.5%
Psychiatric	0.3%	0.2%	0.4%
Neurological	0.3%	0.1%	0.4%
Gynecological	0.2%	0.2%	0.1%
Trauma	0.2%	0.2%	0.2%
Immunological	0.2%	0.1%	0.2%
Musculoskeletal	0.1%	0.1%	0.1%
Eye	0.1%	0.1%	0.0%
Other	0.4%	0.5%	0.4%
Percentage Not Reporting Disease	72.1%	76.0%	68.7%
Total	100%	100%	100%

Table 5.5 illustrates a breakdown by gender and age in the types of diagnosis noted above. Overall, more females reported having received diagnoses than did males (33.2 percent versus 23.3 percent). Female respondents have had higher percentages of diagnosed cardiovascular disease, gastrointestinal disease, neuromuscular disease, hematological disease, oncological disease, and psychiatric disease, while men reported a higher percentage of pulmonary disease, musculoskeletal disease, and infections.

People younger than 16 reported having had fewer illnesses than others, and almost three-fourths of those older than 55 have been diagnosed with a disease. Generally, more people older than 16 reported some kind of cardiovascular illness; in fact, almost half the population older than 55 claimed to have had cardiovascular illnesses.

Table 5.5 Distribution of People Reporting a Diagnosis of a Particular Illness by Gender and Age

	Gender		Age			
	Male	Female	0-5	0-15	16-55	>55
Percentage Reporting Disease	23.3%	33.2%	7.7%	8.7%	28.7%	74%
Cardiovascular	9.4%	15.5%	0.4%	0.5%	12.5%	46.7%
Gastrointestinal	3.0%	3.5%	0.4%	0.8%	3.2%	5.3%
Pulmonary	2.1%	1.9%	2.3%	2.4%	2.0%	2.3%
Infections	1.9%	1.4%	1.2%	2.0%	1.7%	1.1%
Neuromuscular	1.0%	2.2%	1.8%	0.3%	1.7%	2.9%
Endocrinologic	0.9%	2.2%	0%	0.2%	1.6%	6.8%
Rheumatic	0.7%	1.1%	0.1%	0.2%	0.9%	2.1%
Kidney	0.4%	1.3%	0%	0.4%	0.9%	1.4%
Ear, Nose, and Throat	0.7%	0.7%	0.3%	0.7%	0.7%	0.5%
Hematological	0.2%	0.8%	0.7%	0.5%	0.5%	0.6%
Oncological	0.2%	0.5%	0%	0%	0.4%	1.8%
Psychiatric	0.2%	0.4%	0.1%	0.1%	0.3%	0.3%
Neurological	0.3%	0.2%	0.1%	0.1%	0.3%	0.1%
Gynecological	0%	0.3%	0%	0%	0.2%	0.2%
Trauma	0.2%	0.1%	0%	0%	0.2%	0.2%
Immunological	0.2%	0.1%	0.1%	0.1%	0.2%	0.2%
Musculoskeletal	1.4%	0.5%	0.1%	0.1%	0.9%	0.7%
Eye	0.1%	0.1%	0%	0.1%	0.1%	0.1%
Other	0.4%	0.4%	0.1%	0.2%	0.4%	0.7%
Percentage Not Reporting Disease	76.7%	66.8%	92.3%	91.3%	71.3%	26%
Total	100%	100%	100%	100%	100%	100%

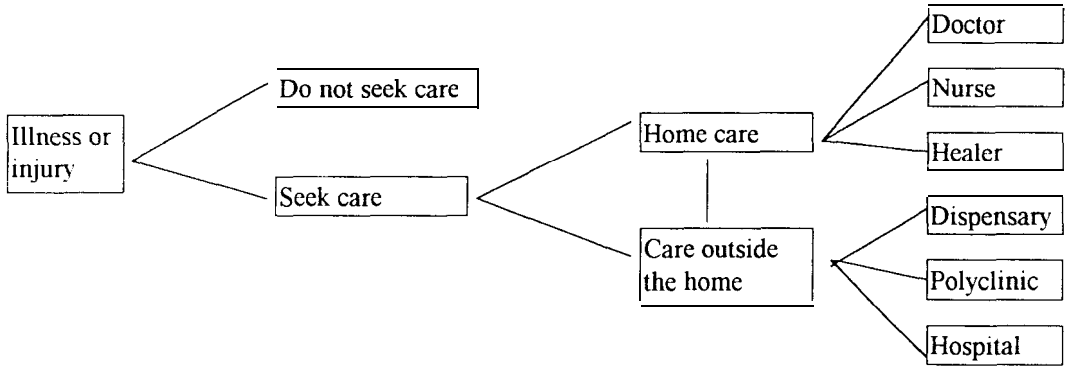
CHAPTER 6

DEMAND FOR CURATIVE CARE (One-Month Recall)

This chapter presents an analysis of the demand for curative care in South Kazakhstan Oblast based on responses to the household survey. As this survey shows, people's demand for curative care usually depends on their having sustained an illness or injury that requires treatment, but just because they are ill or injured does not necessarily mean they will seek such care. Patients seeking care must decide to seek treatment either at home or outside the home. (Many survey respondents were first visited by a medical provider at home and then were referred to another provider or decided to seek additional care outside the home.) Patients must also decide on the type of provider to consult, the payment for medicines and services, the type of facility to visit, and so on.

It is not easy to model the sequential nature of patients' decisions, especially if they seek services from more than one provider. Figure 6.1 illustrates one possible sequence of events in the patient's decision-making process

Figure 6.1: Decision Tree



6.1 Methodology

The survey team used a demand for health care module with a one-month recall period in order to discern health seeking behavior patterns among survey respondents and the reasons for the choices they made. Respondents who answered "yes" to one of the following questions were eligible for the demand for health care module. (Of the 6,860 survey respondents, 280 participated in the module.)

In the past month:
1. Have you been ill or injured?
2. Have you gone to a medical facility to receive a certificate for short-term disability?
3. Have you received medical treatment at a health facility or at your home?

Information was then collected from the respondents concerning treatment they received at home and/or at a government health care facility.

6.2 Seeking Care for Illness or Injury

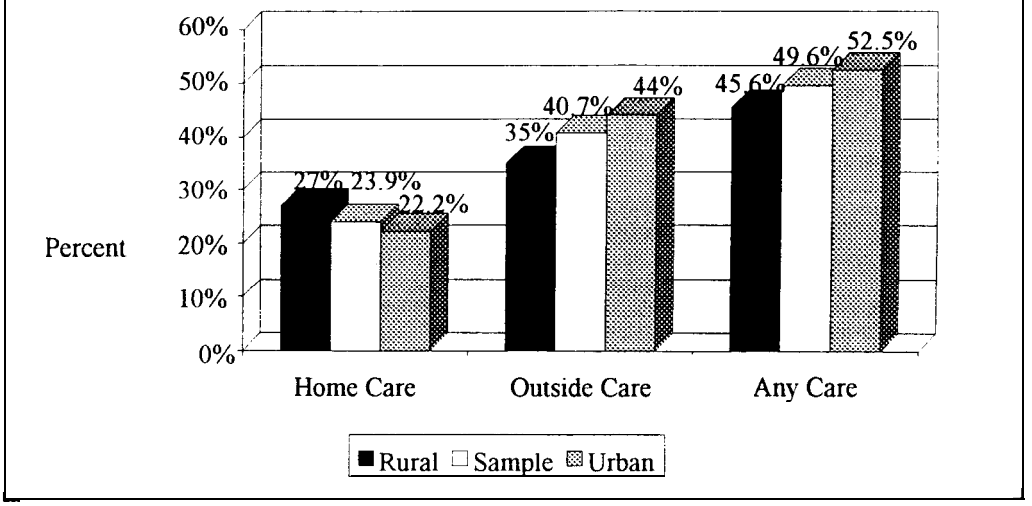
Table 6.1 shows the percentages of respondents who sought health care at home and/or outside the home when ill or injured during the month prior to being interviewed. Overall, almost 50 percent of the sample sought care either at home, outside the home, or both. Individuals seeking care outside the home accounted for 40.7 percent, while those seeking care at home accounted for 23.9 percent. Differences in health care seeking behavior were revealed between residents in rural and urban areas, and by age group, gender and gender of head of household, family income, and marital status of the head of household

Table 6.1 Distribution of People Seeking Treatment When Ill or Injured, at Home and Outside the Home

	Home Care		Outside Home		Any Care		Number
	Yes	No	Yes	No	Yes	No	
Sample	23.9%	76.1%	40.7%	59.3%	49.6%	50.4%	280
Rural	27.0%	73.0%	35.0%	65.0%	45.6%	55.4%	100
Urban	22.1%	77.8%	44.0%	45.0%	52.5%	47.5%	180
Age							
<6	42.1%	57.9%	36.8%	63.2%	57.9%	42.1%	19
<16	31.8%	68.2%	44.2%	55.8%	56.8%	43.2%	44
16-55	23.0%	77.0%	47.0%	53.0%	52.2%	47.8%	152
>55	20.5%	79.5%	28.0%	72.0%	40.5%	59.5%	78
Gender							
Male	20.2%	79.8%	40.6%	59.4%	50.9%	49.1%	109
Female	26.1%	73.9%	42.2%	57.8%	51.2%	48.8%	165
Income Group							
Poorest 25%	29.6%	70.4%	37.5%	62.5%	48.2%	51.8%	81
Richest 25%	22.2%	77.8%	50.0%	50.0%	56.9%	43.1%	63
Marital Status of Head of Household							
Married	17.7%	82.3%	42.3%	57.7%	48.2%	51.8%	185
Not Married	36.4%	63.6%	40.0%	60.0%	52.8%	47.2%	88
Gender of Head of Household							
Male	19.1%	80.9%	40.5%	59.5%	47.8%	52.2%	178
Female	32.3%	67.7%	43.8%	56.2%	51.6%	48.4%	96

Rural residents were less likely to seek care than urban residents (45.6 percent versus 52.5 percent). When rural residents did seek care, however, they were more likely than their urban counterparts to seek it at home rather than at health care facilities (see Figure 6.2).

Figure 6.2: Care Sought, by Residence



Health care seeking behavior also varied by age groups (see Figure 6.3). Children under age 6 were the only population group that received care at home more than outside the home during the month prior to the survey. Respondents older than 55 were consistently below the sample average in seeking care either in or outside the home.

Figure 6.3: Care Sought, by Age Group

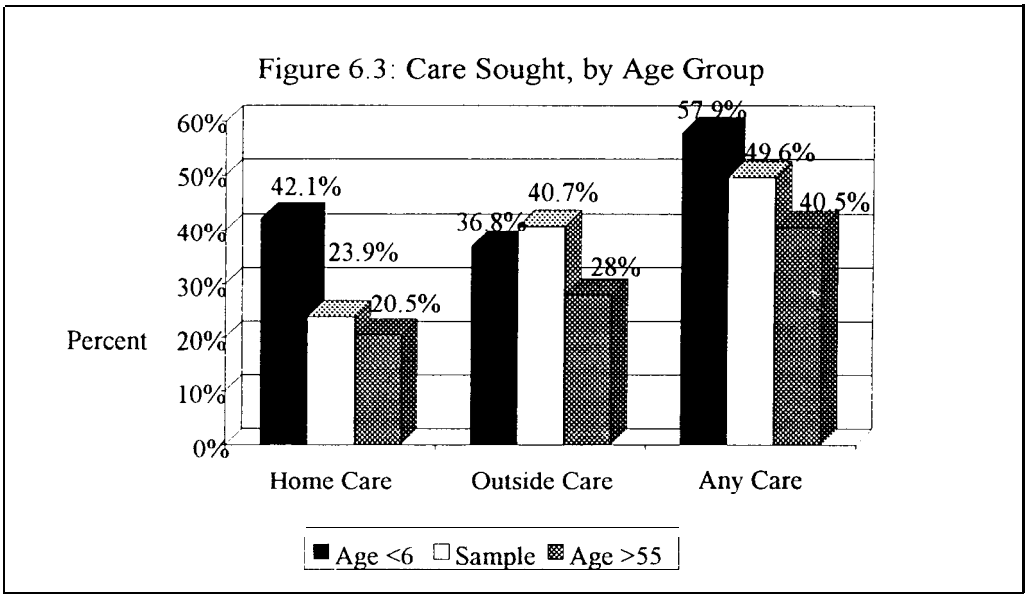
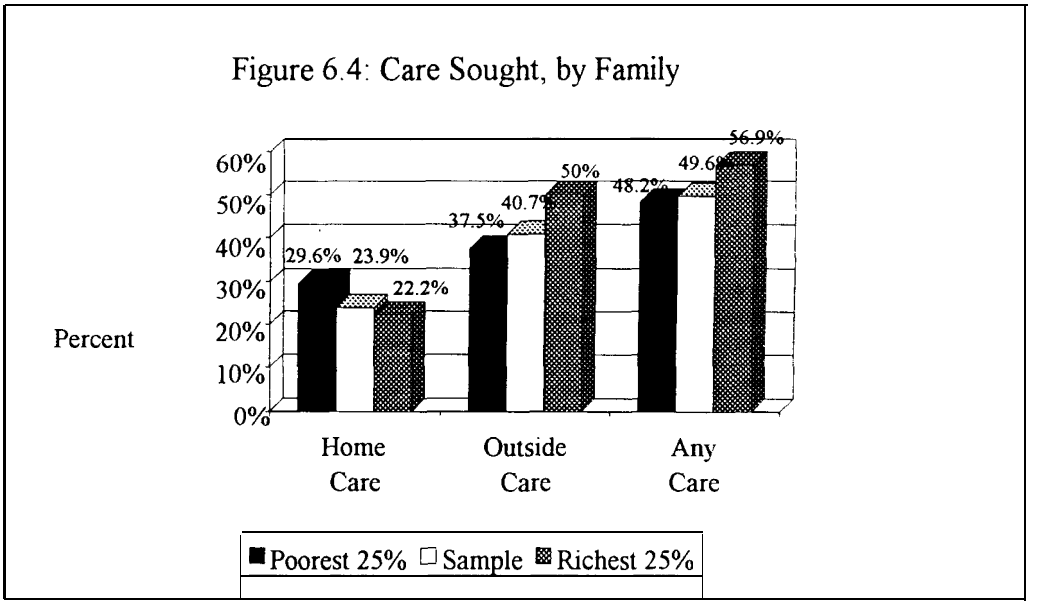


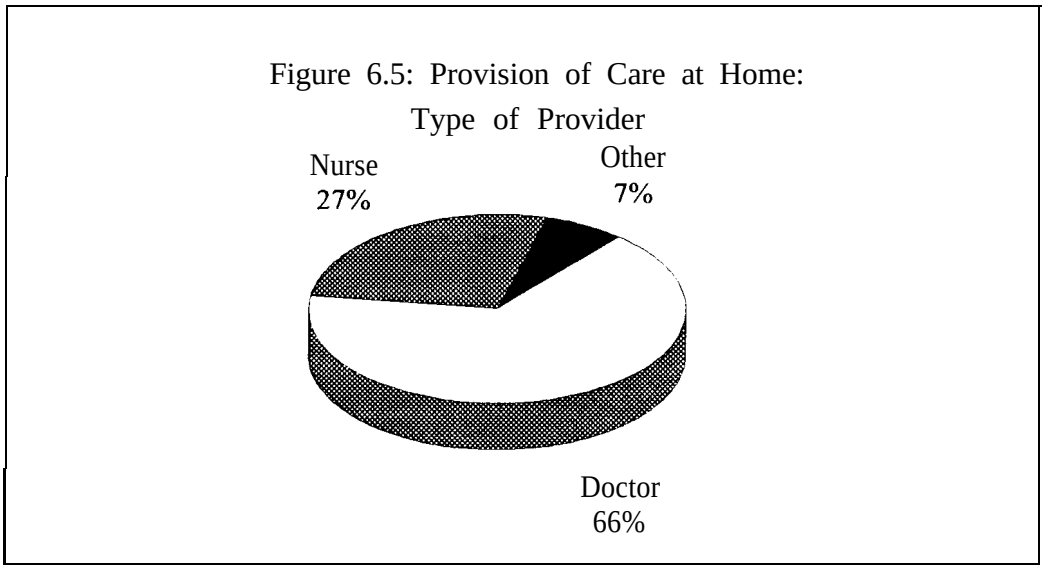
Figure 6.4 shows the difference in health care seeking behavior among respondents by income category. Individuals from the poorest quartile (based on per capita family income) were less likely to seek care outside the home than individuals from the richest quartile. Conversely,

individuals from the poorest quartile were more likely to seek care at home than individuals from the richest quartile.

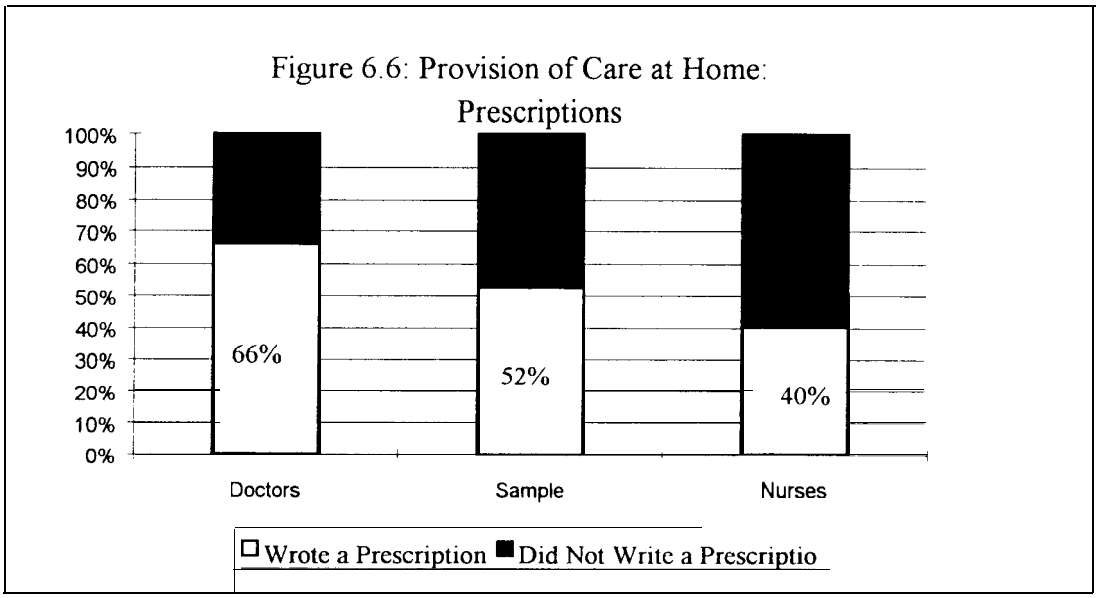


6.3 Treatment at Home

Figure 6.5 shows the type of providers that visit and provide care at home in South Kazakhstan. Doctors represent the largest percentage of home care visits, at 66 percent, followed by nurses, at 27 percent. Included in the "other" category are faith and traditional healers. Of the providers treating patients at home, 40 percent of doctors and 47 percent of nurses provide medicines with their visit.



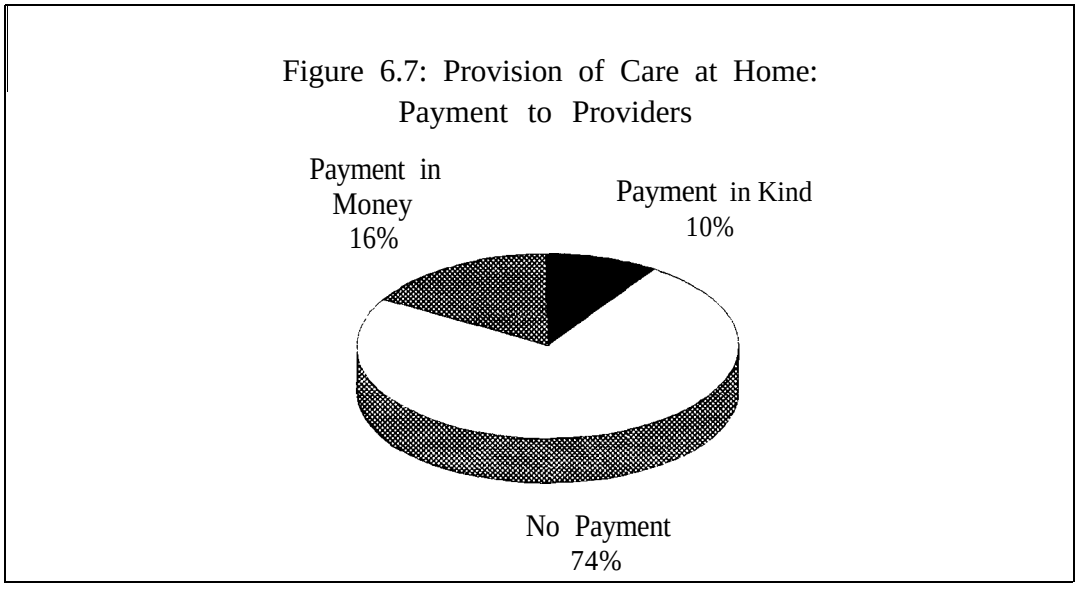
Of the providers visiting patients at home in the month prior to the survey, 52 percent wrote a prescription for medicine. Of the doctors that provided medicine, 45 percent also wrote a prescription. Doctors who did not provide medicine were more likely to write prescriptions (59 percent). Figure 6.6 shows that doctors were more likely to write prescriptions than nurses (66 percent versus 40 percent)



Respondents were asked if they paid health care providers who visited their home. Figure 6.7 shows that 74 percent of the providers were not paid for their home visit, while 16 percent were paid in money and 10 percent in kind. There was no clear difference between nurses and doctors in terms of who received payment (72 percent of doctors and 73 percent of nurses were not paid).

All "other" providers were paid. Payment in money to providers ranged from 50 to 200 tenge (the average was 140 tenge).

Figure 6.7: Provision of Care at Home: Payment to Providers



While most patients did not pay visiting health providers, at least 78 percent had to purchase medicine. The survey identified three groups of medicine purchased by patients or their families: (1) prescribed medicine, (2) medicine purchased in addition to what was prescribed, and (3) medicine purchased before the illness that was available at home at the time of the illness. Between 25 and 40 percent of the medicine used was purchased from the private sector (see Figure 6.8).

Figure 6.8: Provision of Care at Home: Purchase of Medicine

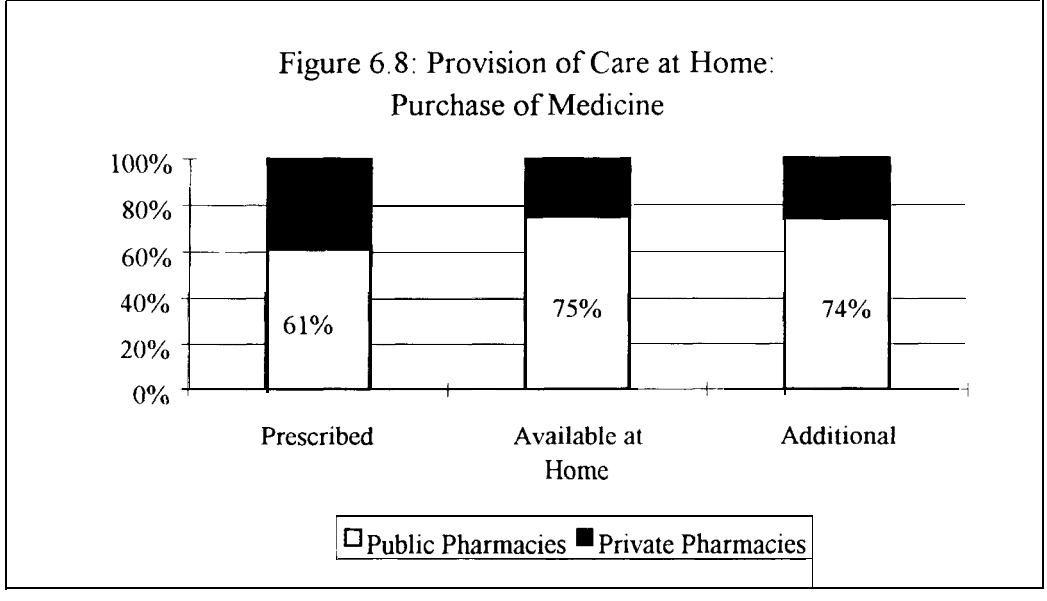
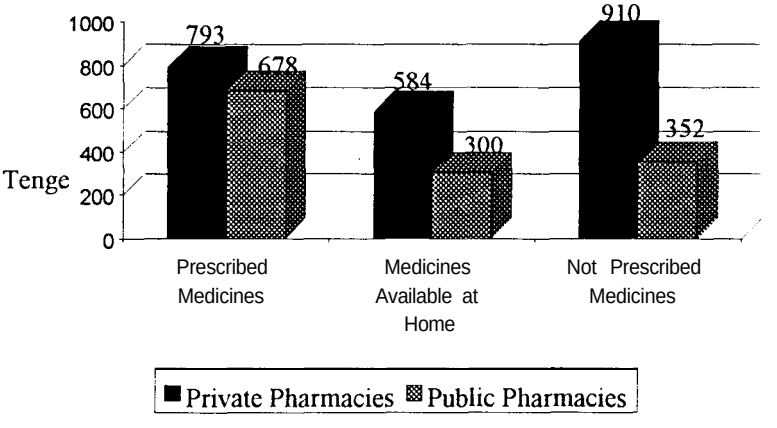


Figure 6.9 shows the average prices paid for the three groups of medicine. It should be noted that the survey team did not collect information on the type of medicine prescribed and bought, the

quantity purchased, or whether the same types of medicine were available at public and private pharmacies. The average payment for medicines that were prescribed was 678 tenge at public pharmacies and 793 tenge at private pharmacies. The average payment for medicines that were available at home was 300 tenge at public pharmacies and 584 tenge at private pharmacies. The average payment for medicines that were purchased in addition to what was prescribed was 352 tenge at public pharmacies and 910 tenge at private pharmacies. Almost all respondents who purchased medicine indicated that they or their family and friends paid for the medicine; none listed his or her employer or the state as contributors.

Figure 6.9: Provision of Care at Home:
Cost of Medicine



6.4 Treatment Outside the Home

Respondents who were ill or injured and sought care outside the home were asked about the type of facility they visited first for treatment. Figure 6.10 shows that 69 percent of the sample first visited a polyclinic, 29 percent visited a hospital, and only 2 percent visited a rural dispensary. Stratifying the sample by residence, rural residents were more likely to visit a hospital (59 percent) than a polyclinic (35 percent), and urban residents were more likely to visit a polyclinic (86 percent) than a hospital (14 percent).

Figure 6.10: Provision of Care Outside the Home:
Type of Facility Visited First

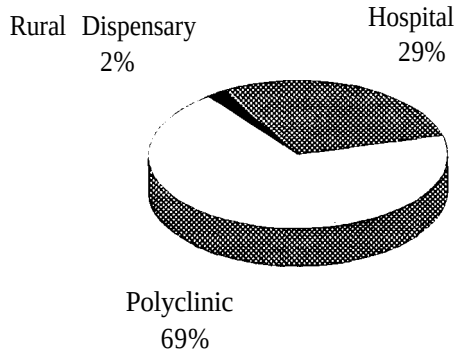
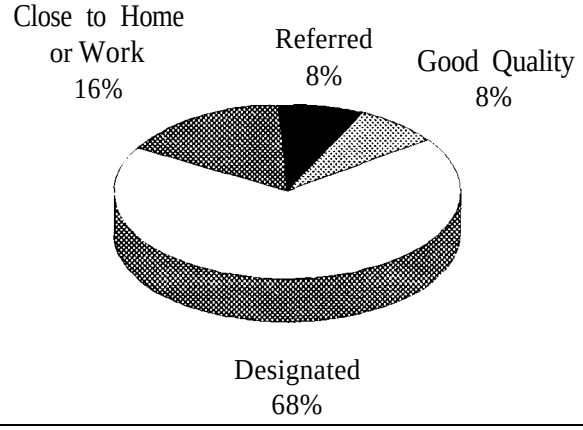


Figure 6.11 shows that 68 percent of the respondents indicated that their reason for choosing the type of facility to visit first was that it was the designated facility. Convenience in terms of distance from home or work was the second most popular reason, at 16 percent. Quality of care and referral were the third most cited reasons, at 8 percent each. Rural residents cited designated facility (82 percent) more than did urban residents (61 percent).

Figure 6.11: Provision of Care Outside the Home:
Reasons for Choosing the First Facility Visited

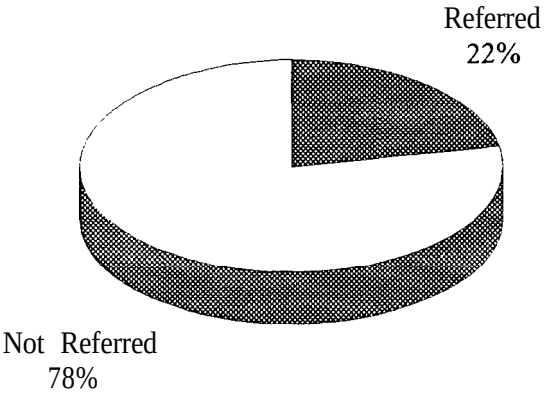


Respondents who visited health care facilities were asked if the reason for the visit was a referral by a health care provider. Figure 6.12 shows that 78 percent of the respondents were not referred. Respondents residing in rural areas were more likely to be referred to health care facilities (31 percent) than residents of urban areas (16 percent). Not surprisingly, respondents visiting a hospital were more likely to have been referred (43 percent) than those visiting a polyclinic.

Respondents were asked the mode and cost of transportation they used to travel to their chosen health care facility, as well as the time it took to reach the facility. More than half (52 percent) of the respondents traveled to the facility by foot, 32 percent took a bus, and 12 percent used a car or truck. The distribution of travel modes differed between rural and urban areas. In rural areas, the most often used mode was walking (67 percent), followed by car or truck (24 percent) and bus (9 percent). In urban areas, too, the most often used mode was walking (46 percent), but bus travel (43 percent) was more frequent than travel by car or truck (7 percent).

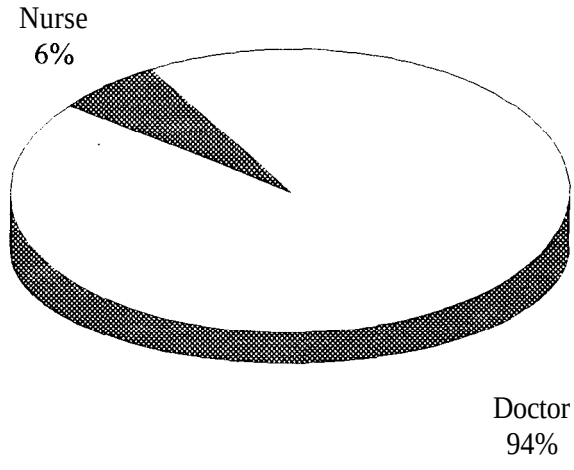
Respondents' payment (for those who paid) for transportation to health care facilities ranged from 2 to 500 tenge, with the average payment being 30 tenge. The average payment for rural residents was 94 tenge, and the average for urban residents, 14 tenge.

Figure 6.12: Provision of Care Outside the Home: Referrals



Respondents who visited a health care facility were also asked which health care provider treated them. Overwhelmingly (94 percent), respondents were treated by doctors (see Figure 6.13). This percentage was slightly higher in polyclinics (96 percent) than in hospitals (93 percent).

Figure 6.13 : Provision of Care Outside the Home: Type of Provider



Of the respondents who visited health care facilities, 32 percent were hospitalized (see Figure 6.14). Rural residents were more likely than urban residents to be hospitalized after their first contact with health care delivery outside the home (42 percent versus 26 percent). Similarly, respondents whose first contact with a facility was at a hospital were more likely to be hospitalized than those visiting a polyclinic (43 percent versus 28 percent). The survey revealed no gender differences in hospitalization rates, but family income was a factor. Respondents from the poorest quartile were more likely to be hospitalized (52 percent) than respondents from the richest quartile (28 percent), although once hospitalized, wealthy residents spent more time in the hospital, on average, than did poor residents (see Figure 6.16).

Figure 6.14: Provision of Care Outside the Home: Hospitalization

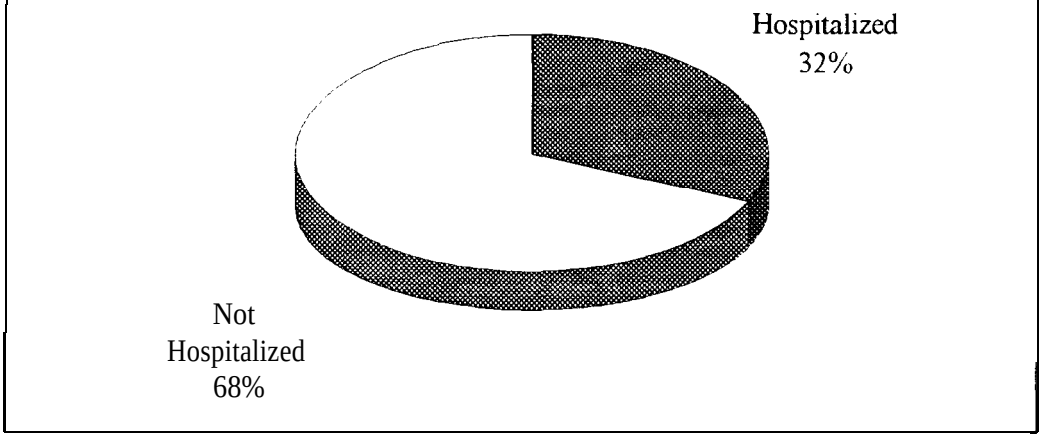


Figure 6.15 shows that more than half of the respondents who were hospitalized spent 20 days or more in the hospital. In fact, the average length of stay for all hospitalized respondents was 20 days. On average, women were hospitalized 3 days longer than men (21 days for women versus 18 days for men; see Figure 6.16). Hospitalization stay was also influenced by residence and family income. Rural residents stayed an average of 16 days in the hospital, while urban residents spent an average of 23 days. Respondents from the poorest family income quartile averaged 15 days in the hospital, while respondents from the richest family income quartile averaged 22 days.

Figure 6.15: Provision of Care Outside the Home: Days Hospitalized

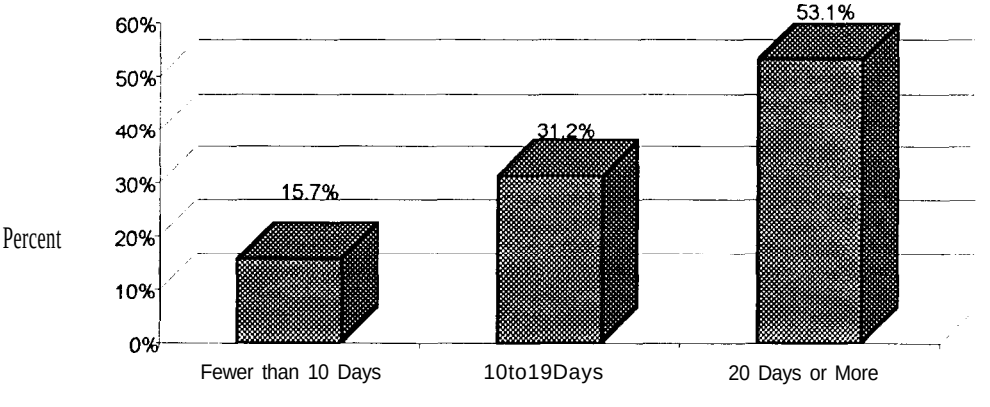
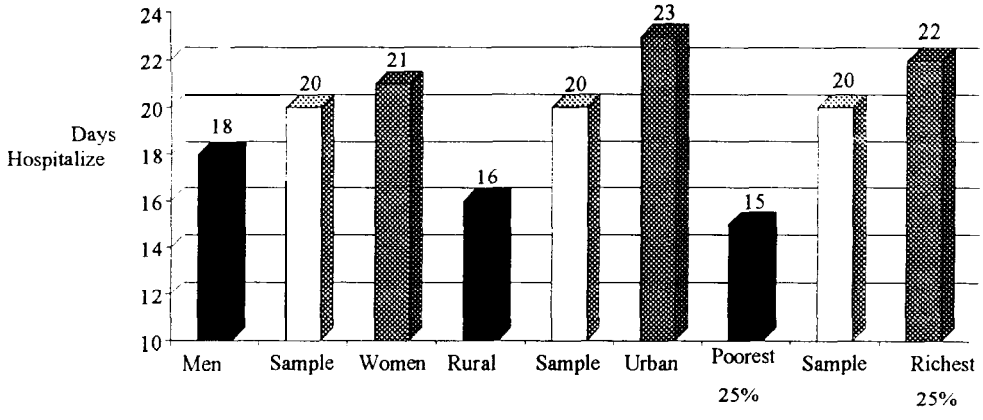
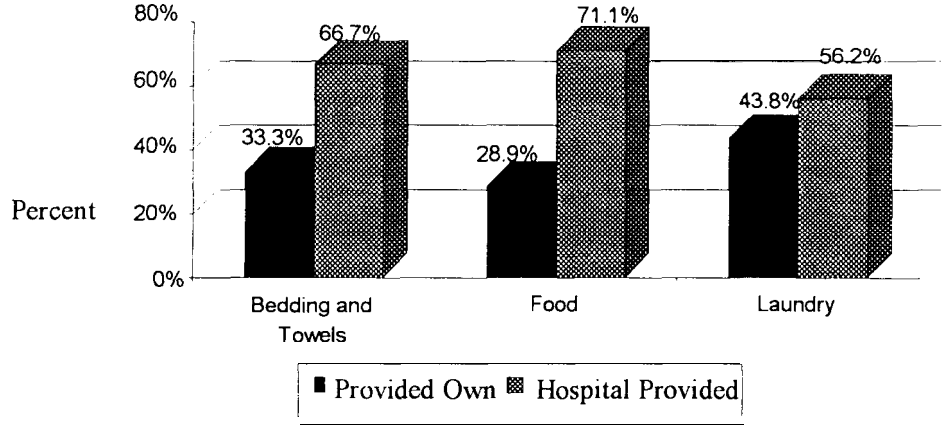


Figure 6.16: Provision of Care Outside the Home:
Number of Days Hospitalized by Gender, Residency, and Family Income



Respondents who had been hospitalized were asked a series of questions about the provision of nonmedical care at the hospital. Figure 6.17 shows that 33 percent of the respondents had to provide their own bedding and towels, 29 percent had to provide their own food, and 44 percent had to provide their own clean laundry

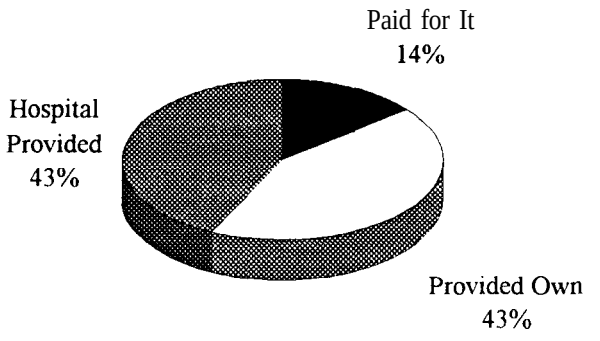
Figure 6.17: Provision of Care Outside the Home:
Availability of Nonmedical Services



Respondents who had been hospitalized were also asked about payments for the medical services they received. Almost all who answered the question said they did not pay. Similarly, almost all who were asked whether they paid the providers at the hospital said they did not. When asked about medicine, however. only 43 percent said the hospital provided the medicine free of charge;

14 percent said they paid for the medicine, and 43 percent had to provide their own medicine (see Figure 6.18).

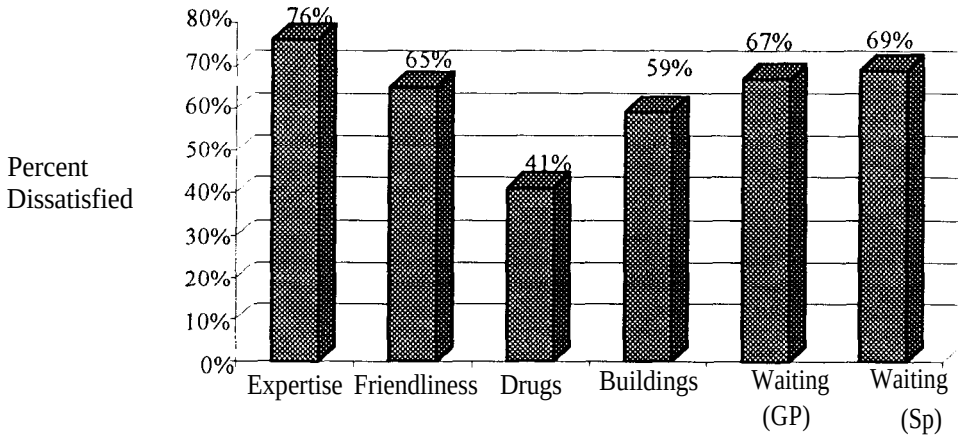
Figure 6.18: Provision of Care Outside the Home: Payment for Medicine



Respondents who sought care outside the home were asked about their satisfaction with the following six aspects of the care they received at health care facilities: (1) the expertise of medical personnel, (2) the friendliness and supportiveness of medical personnel, (3) the availability of medicine, (4) the condition of the buildings housing the health care facilities, (5) waiting time to see an internist, and (6) waiting time to see a specialist. Respondents were asked to rate each of these factors on a scale of 1 to 5, with 1 designating very satisfied; 2, satisfied; 3, neither satisfied nor dissatisfied; 4, dissatisfied; and 5, very dissatisfied.

Figure 6.19 shows a high level of dissatisfaction with the aforementioned aspects of South Kazakhstan's health care facilities (the percentage of "dissatisfied" and "very dissatisfied" were added together to calculate the total dissatisfied). Seventy-six percent of the respondents were either "dissatisfied" or "very dissatisfied" with the expertise of medical personnel. Similarly, 65 percent were unhappy with the friendliness and supportiveness of medical personnel. Forty-one percent were "dissatisfied" or "very dissatisfied" with the availability of drugs, and 59 percent did not like the physical condition of the health care facility buildings. Patients were also dissatisfied with the waiting time to see internists (67 percent) and the waiting time to see specialists (69 percent).

Figure 6.19: Provision of Care Outside the Home: Satisfaction Measures



CHAPTER 7

HOSPITALIZATION

7.1 Methodology

In addition to the hospitalization information collected in the demand for curative care module,[1] which applied to those who had sought medical care within the 30 days prior to being interviewed, the survey team conducted a separate module for those hospitalized in the past year. This module was used to capture a larger sample than that used in the previous module by using a longer recall period.[2] The eligibility criterion for the hospitalization module was a "yes" answer to the following question: Have you been in the hospital in the past year?

7.2 Hospitalization in the Past Year

Table 7.1 shows that 6.3 percent of the household survey's 6,860 respondents had been hospitalized in the past year. Hospitalization rates differed between urban and rural residents, and by age group, gender, family income, and gender and marital status of the head of household.

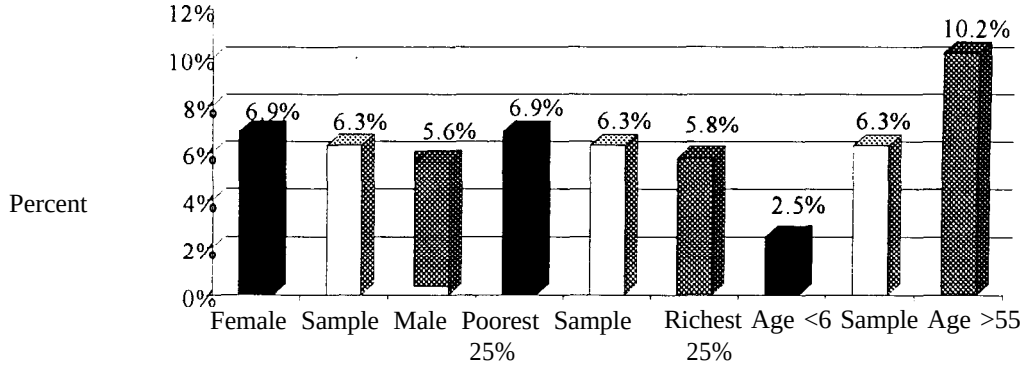
Table 7.1 Hospitalization in the Past Year

	Yes	No	Number
Sample	6.3%	93.7%	6,860
Rural	6.0%	94.0%	3,570
Urban	6.5%	93.5%	3,290
Age			
<6	2.5%	97.5%	765
<16	2.8%	97.2%	2,209
16-55	7.3%	92.7%	3,695
>55	10.2%	89.8%	956
Gender			
Male	5.6%	94.4%	3,371
Female	6.9%	93.1%	3,489
Income Group			
Poorest 25%	6.9%	93.1%	2,269
Richest 25%	5.8%	94.2%	1,145
Marital Status of Head of Household			
Married	6.2%	93.8%	5,513
Not Married	6.6%	93.4%	287
Gender of Head of Household			
Male	6.2%	93.8%	5,352
Female	6.7%	93.3%	1,453

[2] Findings from the curative care module are presented in chapter 6 of this report.
[3] A longer recall period usually means less accurate information because respondents have to remember events that may have taken place farther in the past.

More rural residents had been hospitalized than urban residents, and more of those from the poorest family income quartile had been hospitalized than had respondents from the richest family income quartile. More than four times as many elderly respondents (age 56 or older) had been hospitalized as children under the age of 6 (see Figure 7.1).

Figure 7.1: Hospitalization in the Past Year



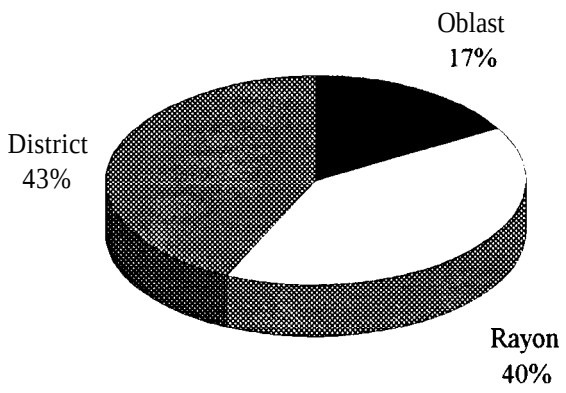
7.3 Hospital Levels

Respondents were asked to which level of hospital they had been admitted. Of the 418 respondents hospitalized, 43 percent had been in district hospitals, 40 percent in rayon hospitals, and 17 percent in oblast hospitals (see Figure 7.2).

While the respondents' gender had no bearing on the type of hospital they used, their place of residence and family income did. Urban residents were more likely than rural residents to have used district and oblast hospitals. Of the hospitalized urban residents, 76 percent used district hospitals, 22 percent used oblast hospitals, and only 2 percent used rayon hospitals. Rural residents, on the other hand, primarily used rayon hospitals (78 percent) rather than oblast or district hospitals (less than 11 percent each).

Although poor and wealthy respondents showed little difference in their use of oblast hospitals (15 percent of the poorest quartile versus 16 percent of the richest), the poor were more likely to have used rayon hospitals and the rich more likely to have used district hospitals. Of the respondents from the richest quartile, 64 percent used district hospitals and 20 percent used rayon hospitals. Conversely, of the respondents from the poorest quartile, 53 percent used rayon hospitals and 32 percent used district hospitals.

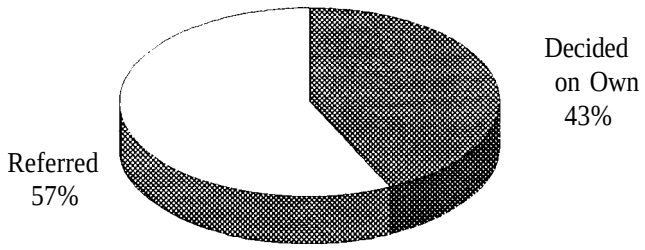
Figure 7.2: Hospitalization in the Past Year: Hospital Level



7.4 Referrals

Respondents who had been hospitalized in the past year were asked whether they had been referred to the hospital or whether they had decided to seek treatment on their own. Figure 7.3 shows that 57 percent of the respondents had been referred to the hospital by a physician. Respondents from rural areas were less often referred to a hospital than were their urban counterparts (50 percent versus 64 percent), and women were less often referred than men (55 percent versus 59 percent). Respondents from the poorest family income quartile were less often referred to hospitals than were respondents from the richest quartile (53 percent versus 64 percent)

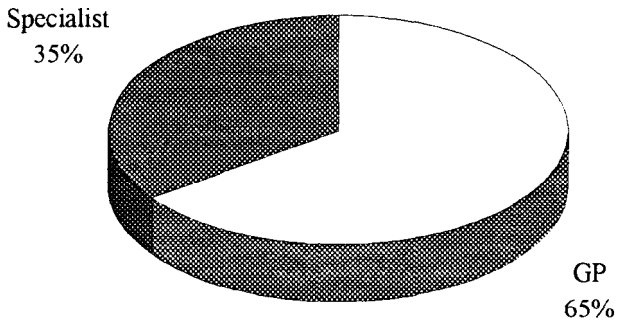
Figure 7.3: Hospitalization in the Past Year: Referrals



Respondents who had been referred by physicians were also asked whether the physician was a specialist or a general practitioner. Figure 7.4 shows that 65 percent of the referrals were made

by general practitioners and 35 percent by specialists. Rural respondents were less likely to be referred by a specialist than were urban respondents (57 percent versus 71 percent), and women were less likely to be referred by a specialist than were men (62 percent versus 68 percent).

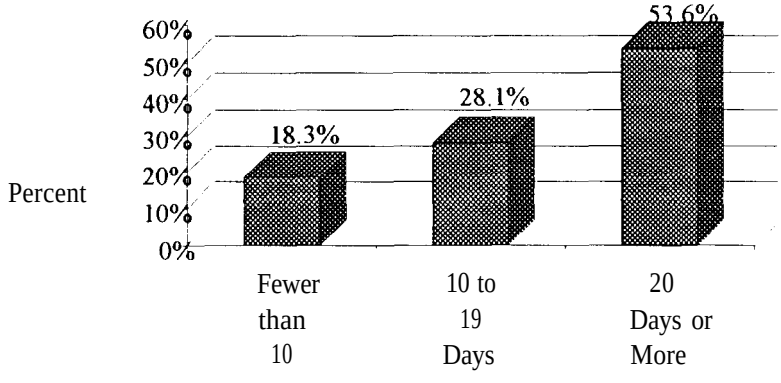
Figure 7.4: Hospitalization in the Past Year: Referrals



7.5 Days Hospitalized

Figure 7.5 shows that 54 percent of the respondents who had been hospitalized spent 20 days or more in the hospital, 28 percent spent 10 to 19 days, and 18 percent spent fewer than 10 days. The average length of stay for all hospitalized respondents was 20 days.

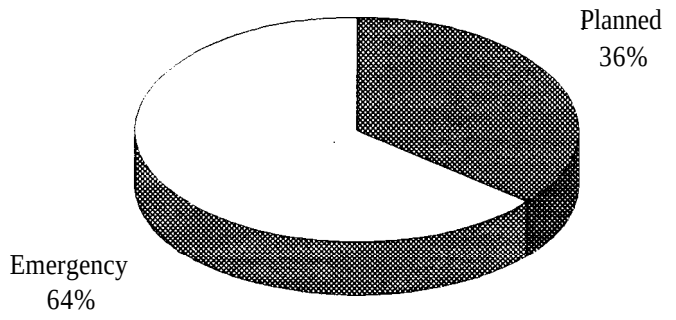
Figure 7.5: Hospitalization in the Past Year: Days Hospitalized



7.6 Planned Stays

Figure 7.6 shows the percentage of hospitalization stays among survey respondents that were planned compared with those that resulted from emergency circumstances. Only 36 percent of the hospitalization stays were planned, and more rural respondents than urban respondents had planned stays (42 percent versus 31 percent). Slightly more women had planned stays than men (38 percent versus 35 percent), and more respondents from the poorest family income quartile had planned stays than did respondents from the richest quartile (38 percent versus 27 percent).

Figure 7.6: Hospitalization in the Past Year: Planned

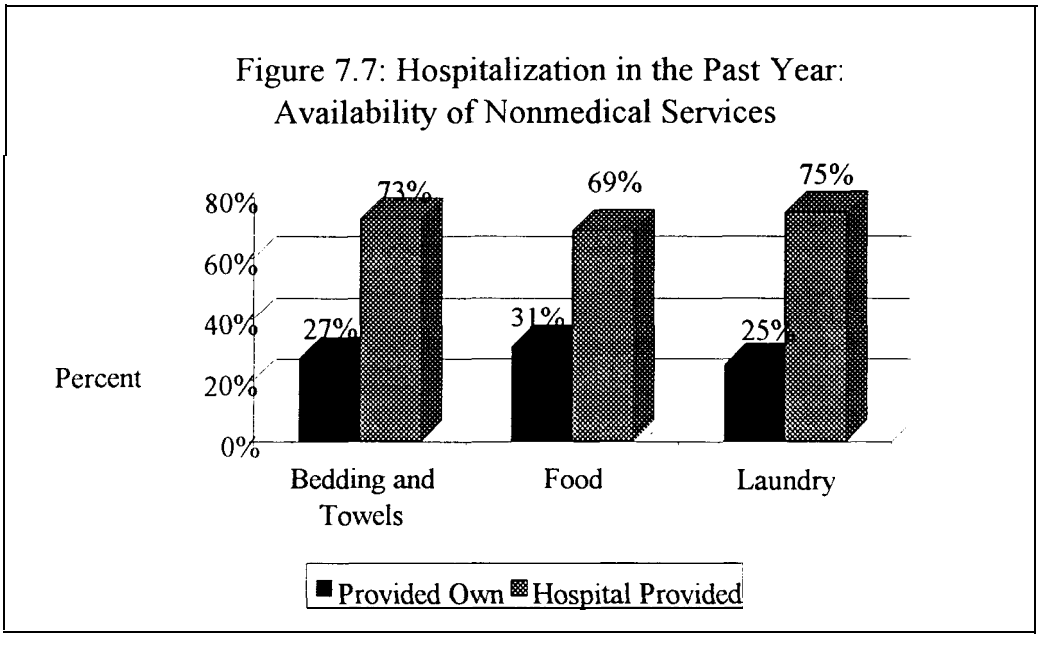


Respondents who had been hospitalized in the past year were also asked whether they had received surgery. Of the sample hospitalized, 23 percent had undergone a surgical procedure. The surgical rates for rural and urban respondents were almost identical (23 percent for rural residents and 22 percent for urban residents), but respondents from the poorest family income quartile were slightly less likely to have had an operation while hospitalized than were respondents from the richest quartile (21 percent versus 23 percent). Men were more likely to have had an operation while hospitalized than were women (25 percent versus 22 percent).

The percentage of hospitalized respondents who had received surgery also differed by the level of hospital they attended. Only 18 percent of those in rayon hospitals had had an operation, while 27 percent of those in district hospitals and 29 percent of those in oblast hospitals had received operations. In addition, 21 percent of those referred by a physician and 27 percent of those who had not been referred had undergone operations.

7.7 Nonmedical Services

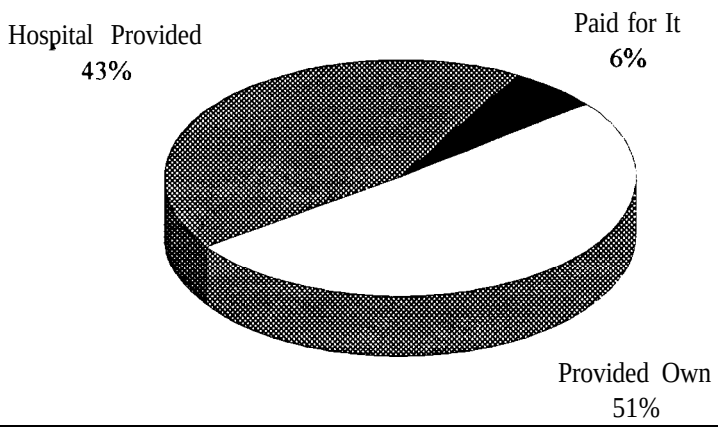
Respondents were asked about the nonmedical care provided to them in the hospital. Figure 7.7 shows that 27 percent of the respondents had to provide their own bedding and towels, 31 percent had to provide their own food, and 25 percent had to provide their own clean laundry,



7.8 Payment for Medicine

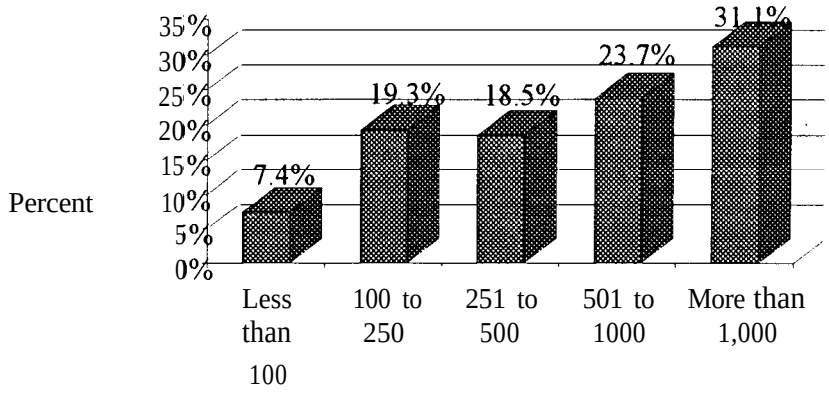
Figure 7.8 shows that the majority of respondents who had been hospitalized in the past year did not receive hospital-provided medicine free of charge. More than half the sample (51 percent) had to provide their own medicine, and 6 percent paid for the medicine the hospital did provide. The highest likelihood of receiving hospital-provided medicine free of charge occurred in district hospitals (46 percent), followed by oblast hospitals (39 percent) and rayon hospitals (38 percent).

Figure 7.8: Hospitalization in the Past Year: Who Paid for Medicine



Respondents who provided their own medicine or paid for hospital-provided medicine were asked about the amount they paid (see Figure 7.9). The largest group (31 percent) paid more than 1,000 tenge, and the smallest group (7 percent) paid less than 100 tenge

Figure 7.9: Hospitalization in the Past Year: Payment for Medicine in Tenge

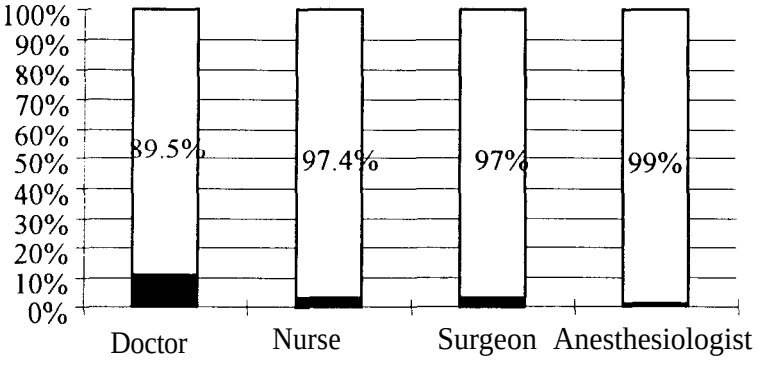


The average payment for medicine was 901 tenge. The average payment was larger for urban than for rural residents (907 tenge versus 897 tenge), for women than for men (932 tenge versus 866 tenge), and for the richest than for the poorest family income quartile (1,632 tenge versus 896 tenge). By hospital level, patients at oblast hospitals paid the most for medicine (1,302 tenge), followed by those at rayon hospitals (890 tenge) and those at district hospitals (700 tenge).

7.9 Payment to Providers

Respondents were asked about their payments to providers at the hospital. Figure 7.10 shows the percentage of the sample that paid four groups of providers: doctors, nurses, surgeons, and anesthesiologists. Only 10.5 percent of the respondents said they paid the doctor who treated them, with the average payment being 541 tenge (the range was from a low of 50 tenge to a high of 6,000 tenge). Only 2.6 percent of the sample paid the nurses who took care of them. This payment averaged 102 tenge and ranged from 20 to 200 tenge.

Figure 7.10: Hospitalization in the Past Year: Payment to Providers



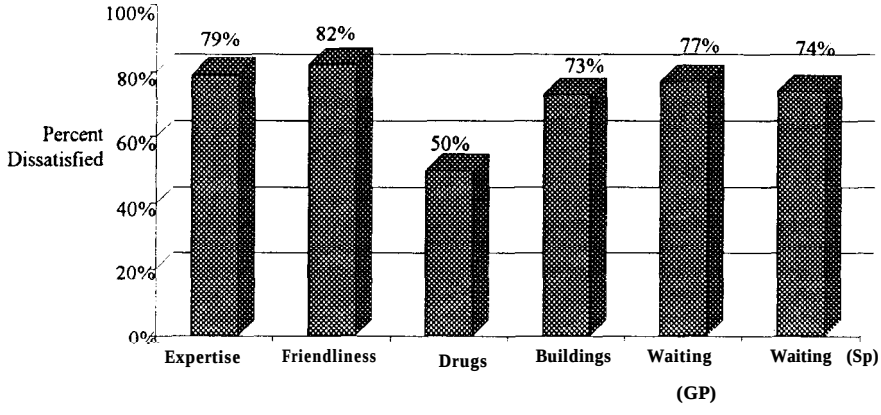
7.10 Satisfaction Measures

Respondents eligible for the one-year hospitalization module were asked the same questions about their satisfaction with the services they received as were respondents to the one-month curative care module. Again, the six aspects of care addressed were (1) the expertise of medical personnel, (2) the friendliness and supportiveness of medical personnel, (3) the availability of medicine, (4) the condition of the buildings housing the health care facilities, (5) waiting time to see an internist, and (6) waiting time to see a specialist. As in the previous module, respondents were asked to rate each of the six aspects on a scale from 1 to 5, with 1 designating very satisfied; 2, satisfied; 3, neither satisfied nor dissatisfied; 4, dissatisfied; and 5, very dissatisfied.

As in the curative care module, respondents in the hospitalization module showed a high level of dissatisfaction with the health care system (see Figure 7.11). Seventy-nine percent of respondents were either "dissatisfied" or "very dissatisfied" with the expertise of medical personnel (the percentage of "dissatisfied" and "very dissatisfied" were added together to calculate the total dissatisfied). Similarly, 82 percent were unhappy with the friendliness and supportiveness of medical personnel, 50 percent were "dissatisfied" or "very dissatisfied" with the availability of drugs, and 73 percent did not like the physical condition of the health care

facility buildings. Patients were also dissatisfied with the waiting time to see internists (77 percent), and with the waiting time to see specialists (74 percent).

Figure 7.11: Hospitalization in the Past Year:
Satisfaction Measures



CHAPTER 8

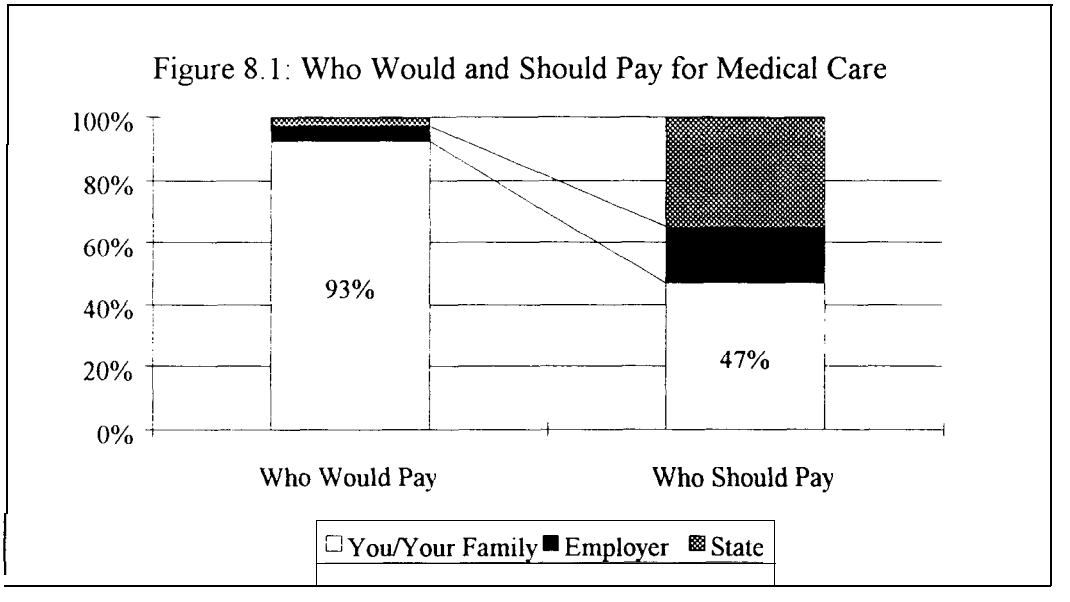
KNOWLEDGE OF AND DEMAND FOR HEALTH INSURANCE

Respondents to the household survey were asked about their knowledge of and demand for health insurance. The questions ranged from general inquiries about who should pay for medical care to specifics about the experience in the past two years of those respondents who possess voluntary health insurance. The questions were asked of all individuals in the sample who were 18 years or older when the survey was conducted.

8.1 Responsibility to Pay

Respondents were first asked about the responsibility to pay for medical care. The first question was, Who would pay if you became ill? The second question was, Who should pay for medical care if you became ill? The answers to the first question indicate that most respondents realize that, given current conditions in the health care sector, they (or their families) would have to pay for medical services (see Figure 8.1). The answers to the second question, however, show that most respondents think their employer and the government should play a larger role in paying for their medical care.

Figure 8.1: Who Would and Should Pay for Medical Care

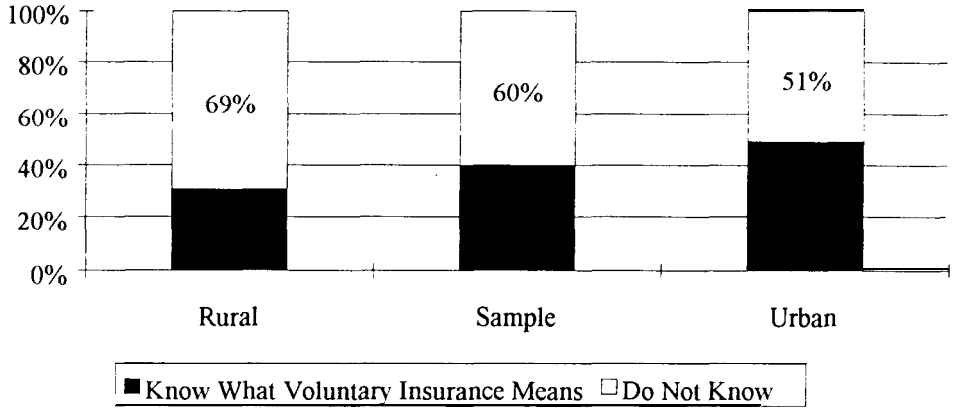


Respondents were also asked whether they would agree to help pay for their medical costs if they became ill. Of those who answered the question, 62 percent said yes. More urban residents than rural residents answered yes (64 percent versus 60 percent), and more men than women answered yes (65 percent versus 60 percent). Additionally, more respondents from the richest than from the poorest family income quartile replied yes (76 percent versus 51 percent).

8.2 Knowledge of Voluntary Health Insurance

Respondents were asked whether they know what "voluntary insurance" means. Figure 8.2 shows that 60 percent of the respondents do not know what the term means. Rural respondents were less likely to know than urban respondents (69 percent of rural residents and 51 percent of urban residents do not know). The survey revealed little difference in knowledge of voluntary insurance by gender but clear differences by level of education. Respondents with the two highest levels of education were more likely to know what "voluntary insurance" means than were those with lower levels of education

Figure 8.2: Knowledge of the Term "Voluntary Insurance"

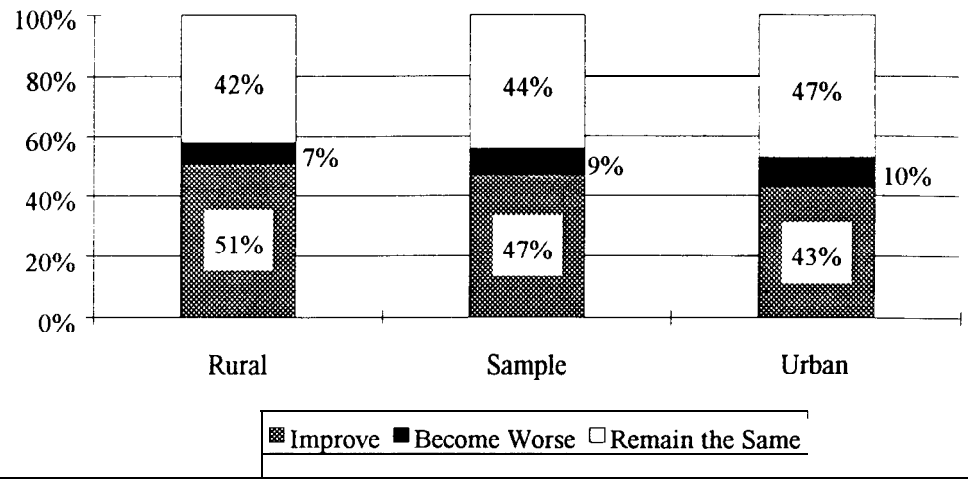


8.3 Expectations of Voluntary Insurance

In order to make sure that all respondents understood the concept of voluntary insurance (VI) before they answered questions about their related expectations and experience, when the survey was conducted, the enumerators read to the participants a short description of health insurance. Participants were then asked what sort of effect they think VI would have on the health care system. Figure 8.3 shows that 47 percent think VI would improve the health care system; 44 percent, that it would have no effect on the system; and 9 percent, that VI would make the system worse. Rural residents have higher expectations for VI to improve the health care system than their urban counterparts (51 percent versus 43 percent). Conversely, a higher percentage of urban than rural respondents think VI would worsen the health care system (10 percent versus 7 percent).

Women were slightly less positive about the impact of VI than were men (46 percent of the women and 48 percent of the men said they think VI would improve the health care system). Respondents with the two highest educational levels were more likely to believe VI would improve the system than were respondents with lower educational attainment.

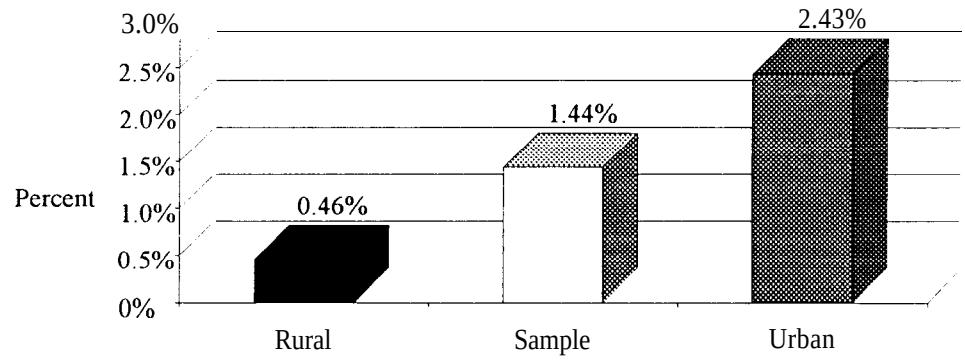
Figure 8.3: Expectations of Voluntary Insurance's Effect on Health Care



8.4 Experience with Voluntary Insurance

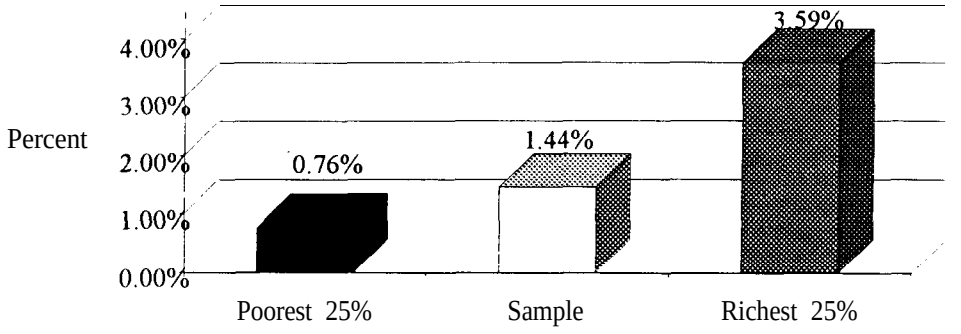
Of the 4,373 respondents who answered the question about enrollment in voluntary insurance plans, only 63 (1.4 percent) indicated that they had been enrolled in such a plan in the past year. Most who had been enrolled live in urban areas (see Figure 8.4). Only 25 percent of respondents' health insurance policies covered the whole family, with the remaining 75 percent covering only the respondent

Figure 8.4: Enrollment in VI in the Past Year by Residence



Respondents from the richest family income quartile were more likely to have been enrolled in VI in the past year than were respondents from the poorest quartile (3.59 percent versus 0.76 percent). (See Figure 8.5.) Women were slightly more likely than men to have been enrolled (1.7 percent versus 1.2 percent), and respondents with the highest level of education were more likely to have been enrolled than were those with lower levels of education.

Figure 8.5: Enrollment in VI in Past Year
by Family Income



The respondents were also asked whether they renewed their VI policy when it expired. Figure 8.6 shows that only 31 percent renewed.

Figure 8.6: VI Policy Renewal Rate

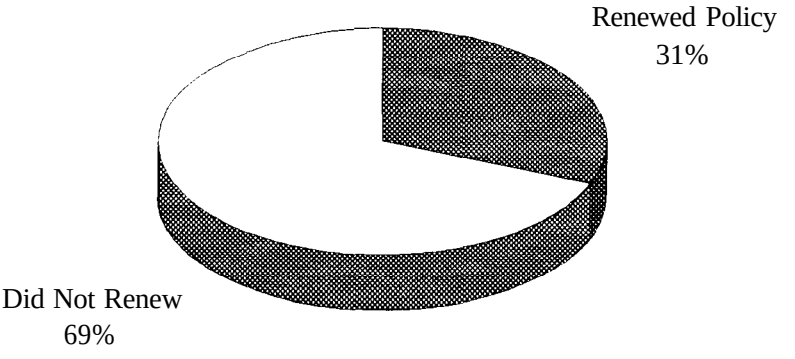


Figure 8.7 shows the reasons the respondents cited most often for not renewing their VI policy. Nineteen percent each did not renew because (1) they did not use the policy, (2) they thought the policy was useless, or (3) they did not trust the insurance company administering the policy. Other reasons given were a change in jobs, closure of the insurance company, and insufficient funds to renew.

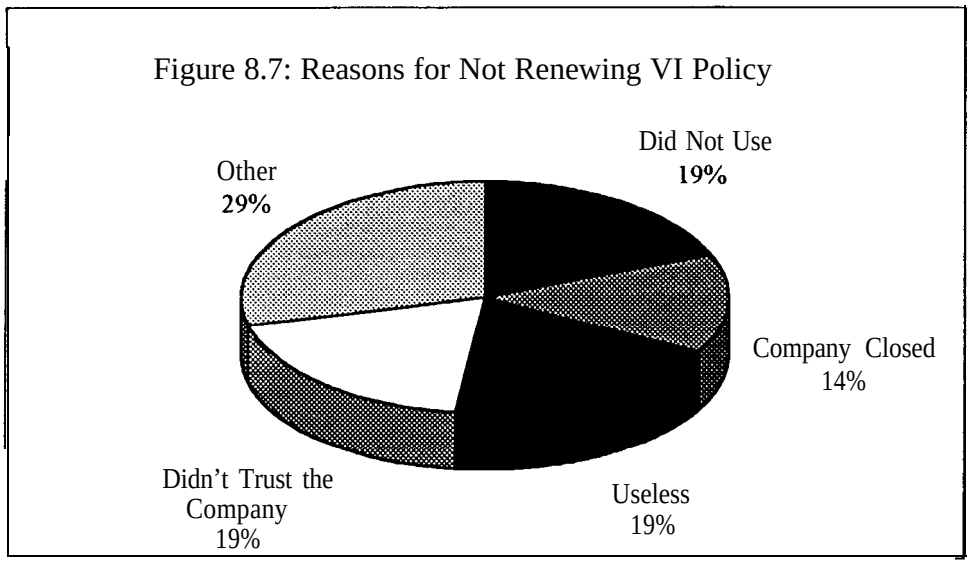
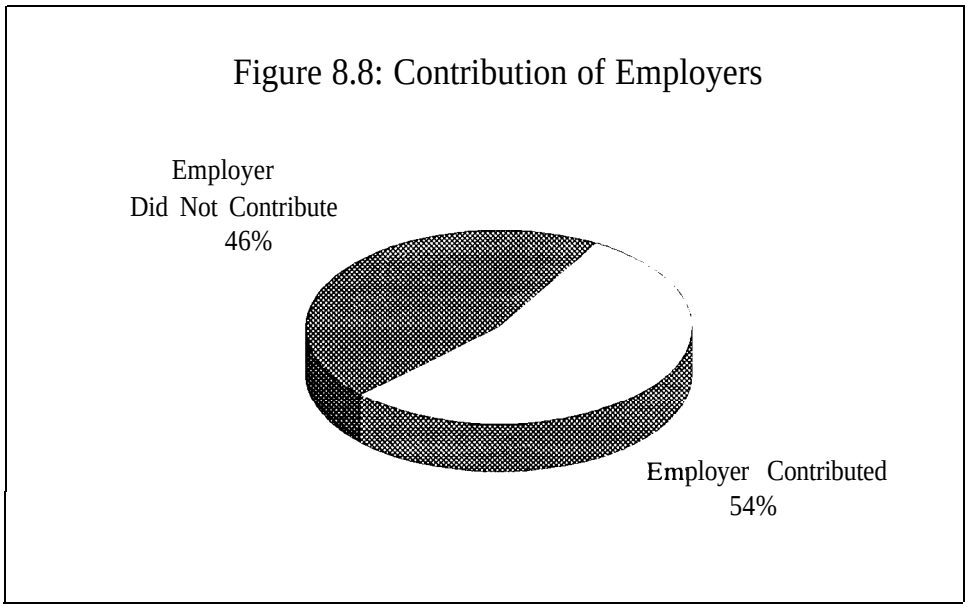
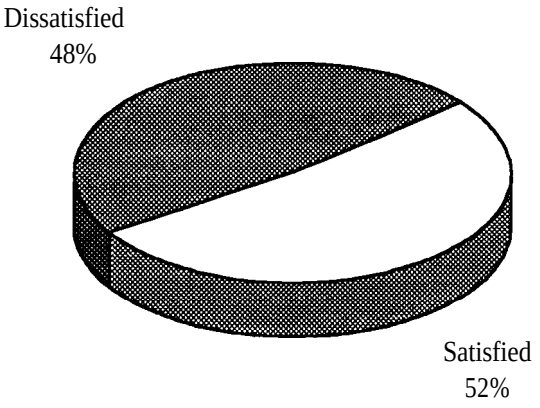


Figure 8.8 shows that for those respondents who had VI in the past year, 54 percent had received contributions from their employer toward purchasing the policy.



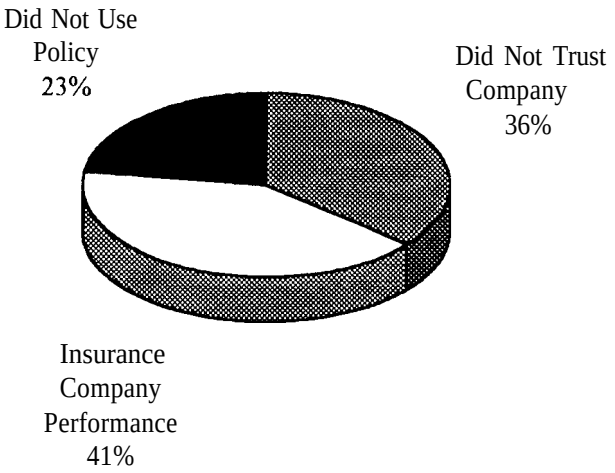
The last two survey questions about respondents' experience with VI in the past year focused on their overall satisfaction with their policy and the reasons for their dissatisfaction. Figure 8.9 shows that, overall, 52 percent of responding policyholders said they were satisfied with the policy they held in the past year.

Figure 8.9: Overall Satisfaction with Insurance



Of those who were dissatisfied with their insurance policy, 41 percent were unhappy with their insurance company's performance, 36 percent did not trust the company, and 23 percent did not use the policy (see Figure 8.10)

Figure 8.10: Reasons for Dissatisfaction with VI



CHAPTER 9

SURVEY RESULTS

9.1 Introduction

The Ministry of Health of the South Kazakhstan Oblast, with technical and organizational assistance from the Zdrav*Reform* Program conducted this household survey to collect information on the current levels of the demand and utilization of health services among the population in the Intensive Demonstration Site. The information from this survey will be used to plan many of the pilot demonstration reforms which the Ministry and Zdrav*Reform* will jointly design and implement over the next two years. This report contains a first analysis and presentation of these survey results. Additional analyses will be conducted, as needed, during the pilot demonstration phase and afterward, during the final program evaluation.

9.2 Summary of Results

Health Status

Subjective Measures of Health

Overall, most survey respondents consider themselves to be in "Very Good/ Good" health (60%). Thirty-one percent rated their health as "Average" with the remaining 9 percent in the "Bad/ Very Bad" categories. More older people, women, and inhabitants of urban areas consider their health status as "Bad/ Very Bad".

Use of Pharmaceuticals

Only 18 percent of the survey respondents reported using pharmaceuticals in the past seven days. This percentage, however, was higher among urban residents (23% compared to 14% in rural areas), women (23% compared to 14% among men), respondents over 55 years (43% compared to 13% for those 55 years and yonder), and the richest quartile (23% compared with 14% for the poorest).

Number of Operations

Overall, 20 percent of the survey respondents ever had had an operation, More urban than rural residents (23% verses 18%) those over 55 years of age (42% verses 12%) and those in the richest quartile (25% verses 18%) had ever had operations.

Disease Distribution

A little more that one quarter of the survey respondents reported having been diagnosed with a particular illness. Of those reporting an illness, 13 percent reported cardiovascular problems, 3 percent reported gastrointestinal problems, and 2 percent have had a pulmonary illness, A greater percentage of urban residents reported receiving a diagnosis (31% verses 24% for rural residents).

Demand for Curative Care

Seeking Care for Illness or Injury

In the month previous to the survey; 50 percent of those who reported an illness or injury sought care at home and/or outside the home at a health facility. Twenty-four percent of this group sought care at home while 41 percent sought care at a health facility. A higher percentage of urban residents sought care than rural residents (53% verses 47% as did members of the richest households (highest quartile) compared to members of the poorest households (57% verses 48%).

Treatment at Home

For home visits, doctors provided treatment in 66 percent of the cases, followed by nurses (27%) and other personnel (7%). Respondents reported that they had paid (in cash or kind) for this visit in 26 percent of the cases. While most respondents did not pay visiting health providers, at least 78 percent had to purchase medicines. Between 25 percent and 40 percent of the medicines, depending upon whether they were prescribed or not, were purchased from the private sector. The average payment for medicines that were prescribed was 687 tenge at public pharmacies and 793 tenge at private pharmacies.

Treatment Outside the Home

Of those respondents who sought treatment outside the home, 69 percent first visited a polyclinic, 29 percent a hospital and only 2 percent a rural dispensary. Sixty-eight percent choose this facility because it was their designated facility; another 16 percent choose it because it was close to home or work and only 8 percent cited ‘good quality” as the reason for attending this facility. Overwhelmingly (94%) respondents were treated by doctors. Thirty-two percent were hospitalized; the average length of stay for these patients was 20 days,

Thirty-three percent of the respondents who were hospitalized reported that they had provided their own bedding and towels; 29 percent had to provide their own food, and 44 percent had to provide their own clean laundry. While almost no respondents reported that they had had to pay for medical services, only 43 percent reported that the hospital had provided medicine free-of-charge. Fourteen percent said that they had paid for medicines and 43 percent had to provide their own medicine.

Respondents who sought care outside the home were very dissatisfied with the quality of care they received. Seventy-six percent were dissatisfied with the expertise of the medical personnel,. Similarly, 65 percent were not happy with the friendliness and supportiveness of the medical personnel. 41 percent were dissatisfied with the availability of drugs, 59 percent did not like the physical condition of the building and 67 percent were dissatisfied with the waiting time to see internists.

Knowledge of and Demand for Health Insurance

All respondents 18 years and older were asked about the responsibility to pay for medical care. Asked who would pay if they became ill, 93 percent responded that they or their family would pay. Asked who should pay, 47 percent said they/their family, with the remainder saying that either their company or the state should pay. However, 62 percent also agreed that they should help pay for medical costs if they became ill.

Knowledge of Voluntary Health Insurance

Sixty percent of the respondents did not know what "voluntary insurance" was. Rural respondents were less likely to know than urban residents (69% verses 51%).

In order to be sure that all respondents understood the concept of voluntary health insurance, enumerators than read a short description of health insurance to each respondent. Respondents were then asked what sort of effect they thought such a reform would have on the health system. Forty-seven percent replied that insurance reform would improve the system, 44 percent thought the system would remain the same, and 9 percent thought the system would become worse.

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Experience with Voluntary Health Insurance

Very few of the respondents (1.4%) indicated that they had been enrolled in such a health insurance plan in the past year. Only 25 percent of these policies covered the entire family; the remaining 75 percent covered only the respondent. Only 31 percent of the respondents renewed their policies when they expired. Three reasons for non-renewal were each cited by 19 percent of the respondents: (1) did not use the policy, (2) the policy was "useless", and (3) they did not trust the insurance company. Overall, 52 percent of the respondents with insurance policies stated that they had been satisfied with the policy.